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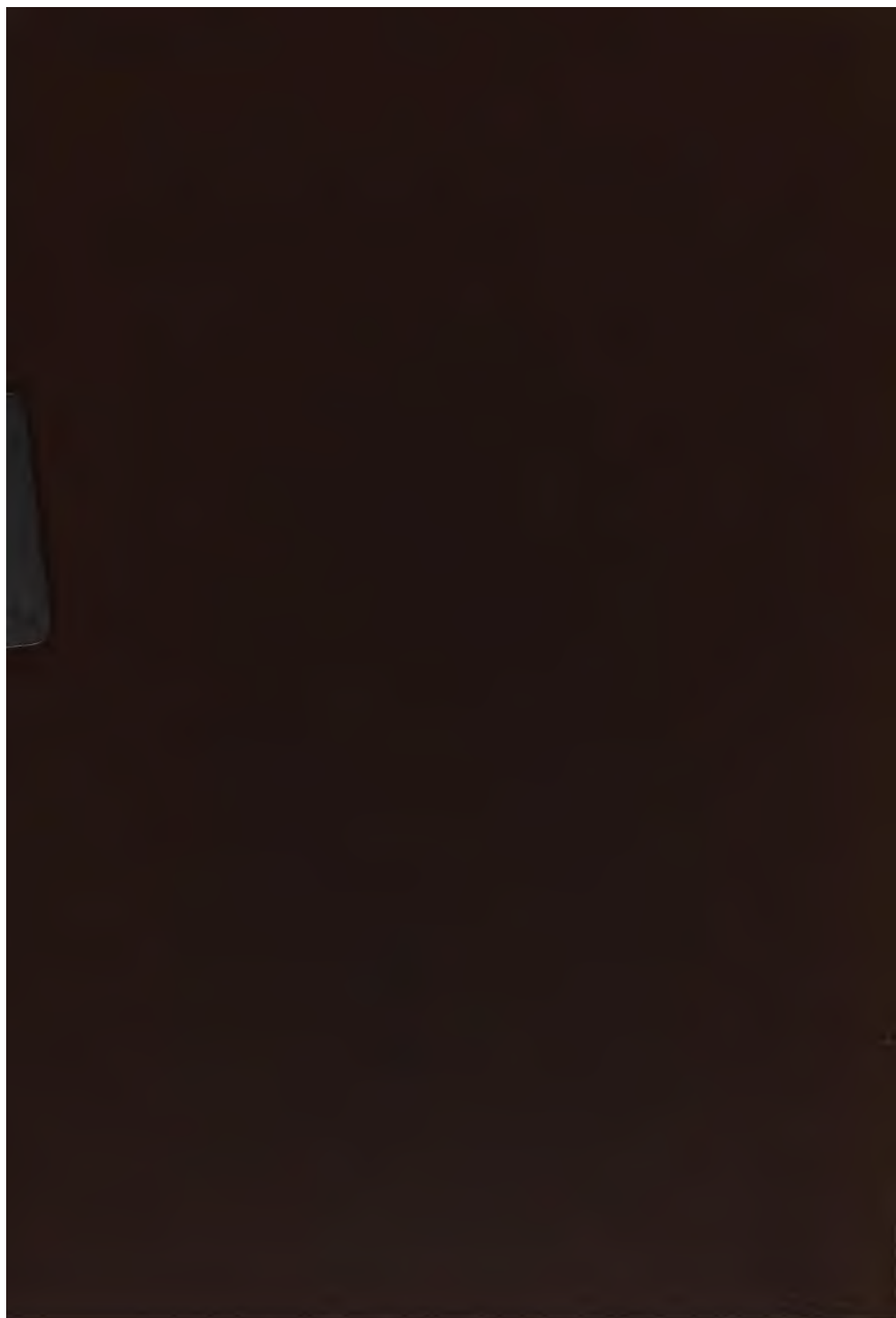


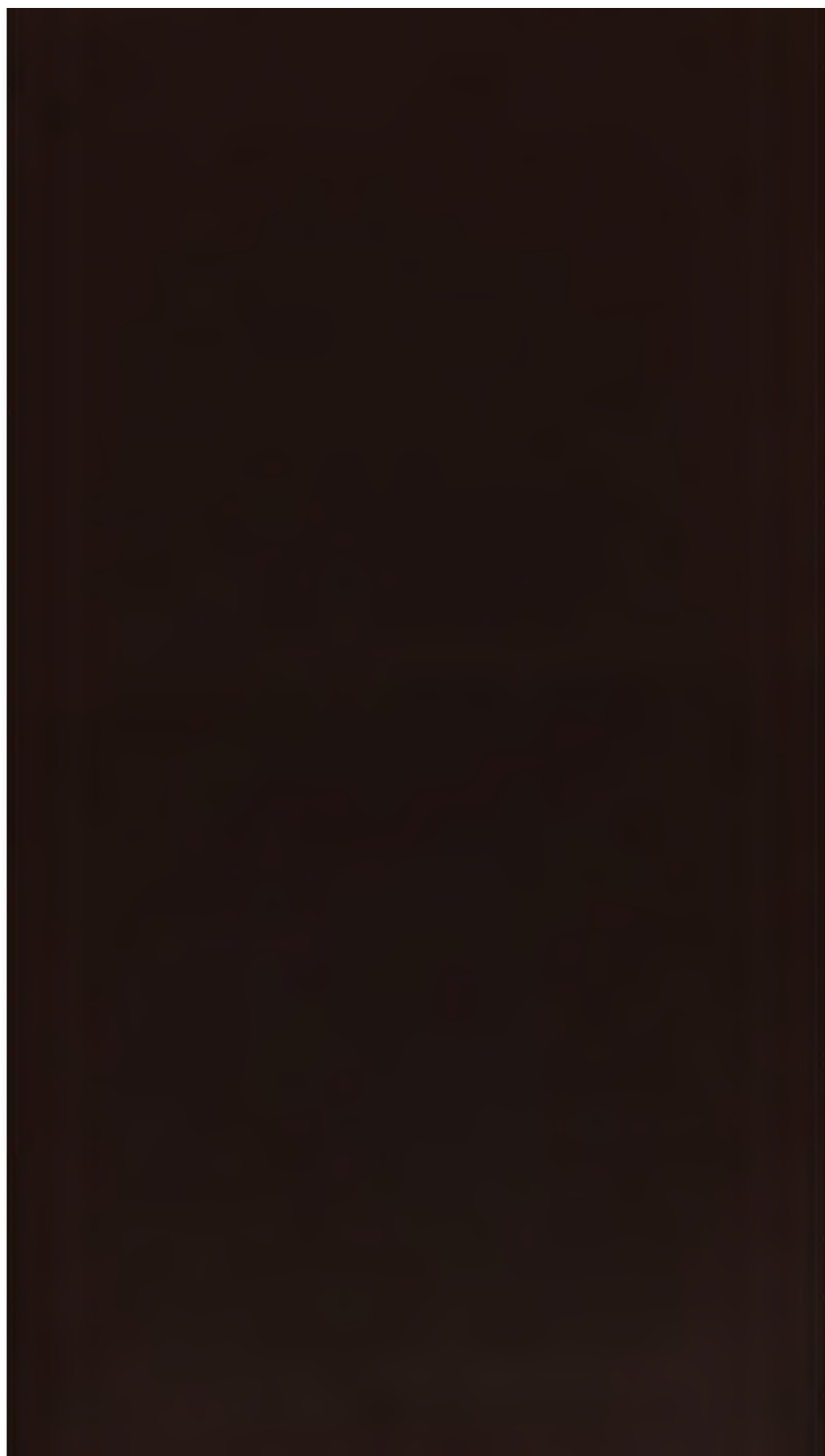
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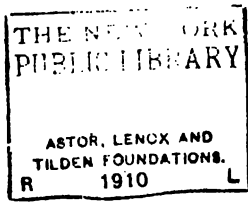
ANNUAL REPORT
OF THE
STREET DEPARTMENT



OF THE
CITY OF BOSTON
1900







ANNUAL REPORT

OF THE

STREET DEPARTMENT

FOR THE

YEAR 1900

COMPLIMENTS OF ...

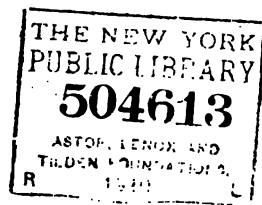
BERTRAND T. WHEELER,

Superintendent of Streets.

PLEASE EXCHANGE.

BOSTON
MUNICIPAL PRINTING OFFICE
1901

Boston
FEB 1 1901
VTHH



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HON. THOMAS N. HART,

Mayor of the City of Boston :

SIR,— In compliance with the Revised Ordinances, the annual report of the operations and expenses of the Street Department for the year 1900 is herewith respectfully submitted.

ORGANIZATION.

The work of the Department during the past year has been carried on under the same organization that was effected when the consolidated Department was created in 1891, and as amended in 1895, the several Divisions of the Department being as follows :

Central Office.	Paving Division.
Boston and Cambridge	Sanitary Division.
Bridges.	Sewer Division.
Bridge Division.	Street-Cleaning Division.
Ferry Division.	Street-Watering Division.

Each of the above Divisions, with the exception of the Central Office and the Boston and Cambridge Bridges, is in charge of a Deputy Superintendent.

The Boston and Cambridge Bridges are managed by two commissioners, the Superintendent of Streets being the commissioner for the City of Boston, the other commissioner being appointed by the Mayor of the City of Cambridge.

APPROPRIATIONS.

The money assigned for Street Department work for the past year was made available under the following appropriations :

First. — Maintenance: From income of the City raised by taxes. At the commencement of the financial year, February 1, the Department estimates of the amounts necessary for the proper maintenance of the various Divisions are submitted to His Honor the Mayor, who makes such recommendation as he may deem proper to the City Council. The maintenance appropriations, as passed by the City Council, were as follows :

Central Office	\$20,000 00
Bridge Division	173,000 00
Cambridge and Boston Bridges	18,500 00
Ferry Division	237,000 00
Paving Division	780,000 00
Sanitary Division	600,000 00
Sewer Division	350,000 00
Street-Cleaning Division	330,000 00
Street-Watering Division	175,000 00
Total.	<hr/> \$2,683,500 00

Second. — Work done under appropriations for permanent improvements: There was made available by the City Council from income of the City raised by taxes \$1,031,200 for general new or reconstruction work, and for special items, as follows :

Bridge Division	\$18,000 00
Paving Division	388,200 00
Street Improvements (\$25,000 to each ward)	625,000 00
Total	<hr/> \$1,031,200 00

Third. — Work done under appropriations for permanent improvements: There was made available by the City Council from money within the debt limit \$96,300 for new work as follows :

Bridge Division	\$6,300 00
Paving Division	15,000 00
Sanitary and Street Cleaning Divisions	75,000 00
Total	<u>\$96,300 00</u>

Fourth. — In 1891 an Act was passed by the Legislature, and amended in 1897, entitled, "An Act Relating to the Location, Laying-Out and Construction of Highways in the City of Boston." (Chap. 323, Acts of 1891.) Loans under this Act are outside the debt limit. From this fund new streets assessable on the abutting property are built. The amount expended the past year was :

Streets	\$84,497 31
-------------------	-------------

Fifth. — In 1899 an Act was passed by the Legislature entitled, "An Act relative to Laying-Out and Construction of Highways in the City of Boston." (Chap. 443.) Loans under this Act are outside the debt limit. The amounts expended for street construction last year in each district were as follows :

District.	
Brighton	\$11,800 23
Dorchester	112,872 71
East Boston	62,934 32
Roxbury and West Roxbury	70,337 07
Total	<u>\$257,944 33</u>

Sixth. — In 1895 an Act was passed by the Legislature, and amended in 1898, entitled, "An Act to provide for the Laying-Out and Construction of Certain Highways in the City of Boston" (commonly known as the Boulevard Act). (Chap. 334 of 1895; chap. 236 of 1898.) Loans under this Act are outside the debt limit. The amount expended this year was as follows :

Streets	\$58,677 26
-------------------	-------------

Seventh. — In 1899 an Act was passed by the Legislature, entitled, "An Act relative to Stony Brook in the City of Boston." (Chap. 397.) Under this Act the loan is outside the debt limit. The amount expended this year was \$198,481.35.

Eighth. — In 1895 an Act was passed by the Legislature, entitled, "An Act relative to the establishment of a New Ferry Landing in the City of Boston." (Chap. 435.)

Under this Act the loan is outside the debt limit. The amount expended this year was \$96,191.74.

In 1898 the City of Boston sold to the United States Government the ferry-boats "Governor Russell," and the "East Boston" for the sum of \$71,000 and \$57,500, respectively, making a total of \$128,500, which, under an order of the City Council, was transferred to an appropriation for "New Ferry-boats." The amount expended this year was \$8,781.81.

Ninth. — In 1896 an Act was passed by the Legislature, entitled, "An Act to provide for a Union Station for Passengers on Railroads Entering the Southerly part of the City of Boston." (Chap. 516.) Loans under this Act are outside the debt limit. The amount expended this year was as follows:

Streets	\$28,556 98
-------------------	-------------

Tenth. — In 1897 an Act was passed by the Legislature, entitled, "An Act Relative to the Sewerage Works of the City of Boston." (Chap. 426.) Under this Act the loan is outside the debt limit. From this fund all "Sewerage Works" are built.

The amount expended the past year was . . .	\$921,140 48
---	--------------

Eleventh. — In 1900 an Act was passed by the Legislature and accepted by the City Council entitled, "An Act Relative to Laying Out and Constructing Highways in the City of Boston." (Chap. 478.) Under this Act the loan is inside the debt limit. From this appropriation all street and sewerage works construction in highways laid out previous to July 17, 1900, may be built. On account of the date of its acceptance by the City Council (December 29, 1900) no expenditures were incurred in 1900. The amount appropriated under this Act was \$1,300,001.

Thus the expenditures under the several appropriations of the year 1899 were as follows:

From Income of the City Raised by Taxes.

Maintenance	\$2,681,843 71
Street Improvements, by wards	436,962 80
Bridge, specials	6,468 37
Paving, specials	248,465 37

From Loans Inside the Debt Limit.

Bridge, specials	2 00
Paving, specials	23,225 73
Street Improvements, by wards	17,421 73

<i>Carried forward.</i>	<u>\$3,414,389 71</u>
---------------------------------	-----------------------

Brought forward \$3,414,389 71

From Loans Outside the Debt Limit.

[Repaid in part to City Treasury by assessment for benefits.]

Laying-Out and Construction of Highways,	84,497 31
Laying-Out and Construction of Highways, by Districts:	
Brighton	11,800 23
Dorchester	112,872 71
East Boston	62,934 32
Roxbury and West Roxbury	70,337 07
Blue Hill and other Avenues (Boulevard Act)	58,677 26
Stony Brook Improvement (Chap. 397, Acts of 1899)	198,481 35
New Ferry Landing	96,191 74
New Ferry-boats	8,781 81
South Union Station	28,556 98
Sewerage Works	921,140 48
Total	<u>\$5,068,660 97</u>

From the moneys provided, as shown in the preceding schedule, the maintenance force of the Department has been permanently and constantly employed during the year, and large amounts of work have been performed by contract, as required by the provisions of many of the Acts providing loans for expenditure by this Department.

Specific features of the work are referred to under the headings which follow, and the work of the Divisions is fully shown in the Appendices attached to this report.

SURETY BONDS.

Much difficulty has in the past been experienced by the Law Department in protecting the City against loss, which it has sustained at the hands of those holding permits from this Department, guaranteed by personal sureties, for doing work in, or occupying the streets. Sureties were found to have disposed of property of which they were possessed when offering themselves as guarantees upon these bonds; and, because of this oft occurring condition, the Department decided to refuse all personal sureties and to accept only the guarantee of the surety companies authorized to do business in the Commonwealth of Massachusetts, fourteen in number.

THE STREET DEPARTMENT DISTRICTS.

Early in the year the ten districts into which the City is

divided for the purpose of this Department, were re-established as follows:

CITY OF BOSTON—STREET DEPARTMENT.

DESCRIPTION OF DISTRICTS.
1900.

The City of Boston is hereby divided into Street Department Districts, ten in number, described and bounded as follows:

District No. 1, South Boston.—Bounded southerly upon District No. 6, Dorchester, namely, from a point on the N. Y., N. H. & H. R.R., Midland Division, north of Massachusetts avenue, in the line of extension of Willow court, thence by and including Willow court and Mt. Vernon street, to the N. Y., N. H. & H. R.R., Plymouth Division, thence by the line of Carson street extended to the harbor.

District No. 2, East Boston and Breed's Island.

District No. 3, Charlestown.

District No. 4, Brighton.—Bounded easterly upon District No. 9, Back Bay, namely, from the Charles river by and including St. Mary's street.

District No. 5, West Roxbury.—Bounded northerly upon District No. 7, Roxbury, namely, from Brookline line by and including Chestnut street to Perkins, Perkins street to Centre, Centre street to Paul Gore, Paul Gore street to Lamartine, Lamartine street to Boylston, Boylston street to Washington, Washington street to Seaver, Seaver street to Blue Hill avenue; bounded easterly upon District No. 6, Dorchester, namely, by and not including Blue Hill avenue to Canterbury street, Canterbury street to Morton, Morton street to Harvard, Harvard street, to Hyde Park Line.

District No. 6, Dorchester.—Bounded westerly upon Districts Nos. 5 and 7, West Roxbury and Roxbury, namely, from Hyde Park line by and including Harvard street to Morton, Morton street to Canterbury, Canterbury street to Blue Hill avenue, Blue Hill avenue to Brookford, Brookford street to Hartford, Hartford street to Robin Hood, Robin Hood street to Magnolia, Magnolia street to Dudley, by and not including Dudley street to N. Y., N. H. & H. R.R., Midland Division, N. Y., N. H. & H. R.R., Midland Division to South Bay, north of Massachusetts avenue; thence bounded northerly by District No. 1, South Boston, namely, by and not including Willow court and Mt. Vernon street to the N. Y., N. H. & H. R.R., Plymouth Division, thence by the line of Carson street extended to harbor.

District No. 7, Roxbury.—Bounded southerly upon District No. 5, West Roxbury, namely, from the Brookline line by and not including Chestnut street to Perkins, Perkins street to Centre, Centre street to Paul Gore, Paul Gore street to Lamartine,

Lamartine street to Boylston, Boylston street to Washington, Washington street to Seaver, Seaver street to Blue Hill avenue; bounded easterly by District No. 6, Dorchester, namely, by and not including Blue Hill avenue to Brookford street, Brookford street to Hartford, Hartford street to Robin Hood, Robin Hood street to Magnolia, Magnolia street to Dudley, by and including Dudley street to N. Y., N. H. & H. R.R., Midland Division, N. Y., N. H. & H. R.R., Midland Division, to Norfolk avenue; bounded northerly by District No. 8, South End, namely, by and not including Norfolk avenue to Hampden street, Hampden street to line of East Lenox produced by this line and not including East Lenox street to Lenox, Lenox street to Tremont, Tremont street to Camden, Camden street to N. Y., N. H., & H. R.R., Providence Division, bounded northerly and westerly by District No. 9, Back Bay, namely, from N. Y., N. H. & H. R.R., Providence Division, by and not including Gainsborough street to Huntington avenue, Huntington avenue to the Brookline line.

District No. 8, South End. — Bounded southerly by District No. 7, Roxbury, namely, from N. Y., N. H. & H. R.R., Midland Division, by and including Norfolk avenue to Hampden street, Hampden street to line of East Lenox produced, East Lenox street to Lenox, Lenox street to Tremont, Tremont street to Camden, Camden street to N. Y., N. H. & H. R.R., Providence Division, bounded westerly by District No. 9, Back Bay, namely, by N. Y., N. H. & H. R.R., Providence Division, to Church street, by and including Church street to Boylston; bounded northerly by District No. 10, West End and North End, namely, by and including Boylston street to Tremont, Tremont street to Winter, Winter street to Summer, Summer street to Devonshire, Devonshire street to Franklin, by and not including Franklin street to Oliver, Oliver street to Fort Point channel.

District No. 9, Back Bay. — Bounded southerly upon District No. 7, Roxbury, namely, from the Brookline line by and including Huntington avenue, to Gainsborough street, Gainsborough street to N. Y., N. H. & H. R.R., Providence Division, bounded easterly by District No. 8, South End, namely, by the N. Y., N. H. & H. R.R., Providence Division, to Church street, by and not including Church street to Boylston; bounded northerly by District No. 10, West End and North End, namely, by and including Boylston street to Arlington, Arlington street to Beacon, Beacon street to Otter, Otter street to Charles river; bounded westerly by District No. 4, Brighton, namely, from Charles river by and not including St. Mary's street to the Brookline line.

District No. 10, West End and North End. — Bounded southerly by Districts Nos. 9 and 8, Back Bay and South End, namely, from Charles river by and not including Otter street to Beacon, Beacon street to Arlington, Arlington street to Boylston, Boylston street to Tremont, Tremont street to Winter, Winter street to Summer, Summer street to Devonshire, Devon-

shire street to Franklin, by and including Franklin street to Oliver, Oliver street to Fort Point channel.

B. T. WHEELER,
Superintendent of Streets.

THE EIGHT-HOUR LAW.

The eight-hour law went into operation a few weeks only previous to the present financial year, and has been strictly complied with. The classes of labor included within the law, not working upon an eight-hour basis at the beginning of the year, have been so established.

The operation of the law has no doubt been a benefit to the employees of the Department, but the theory that as much work would be performed by the laborer in eight hours under the present system as was formerly done in nine has been exploded. The sum necessary to accomplish the work performed by this Department has been increased, because of the requirements of the law, by an amount estimated at \$168,000 for the year.

PROPERTY IN EAST BOSTON.

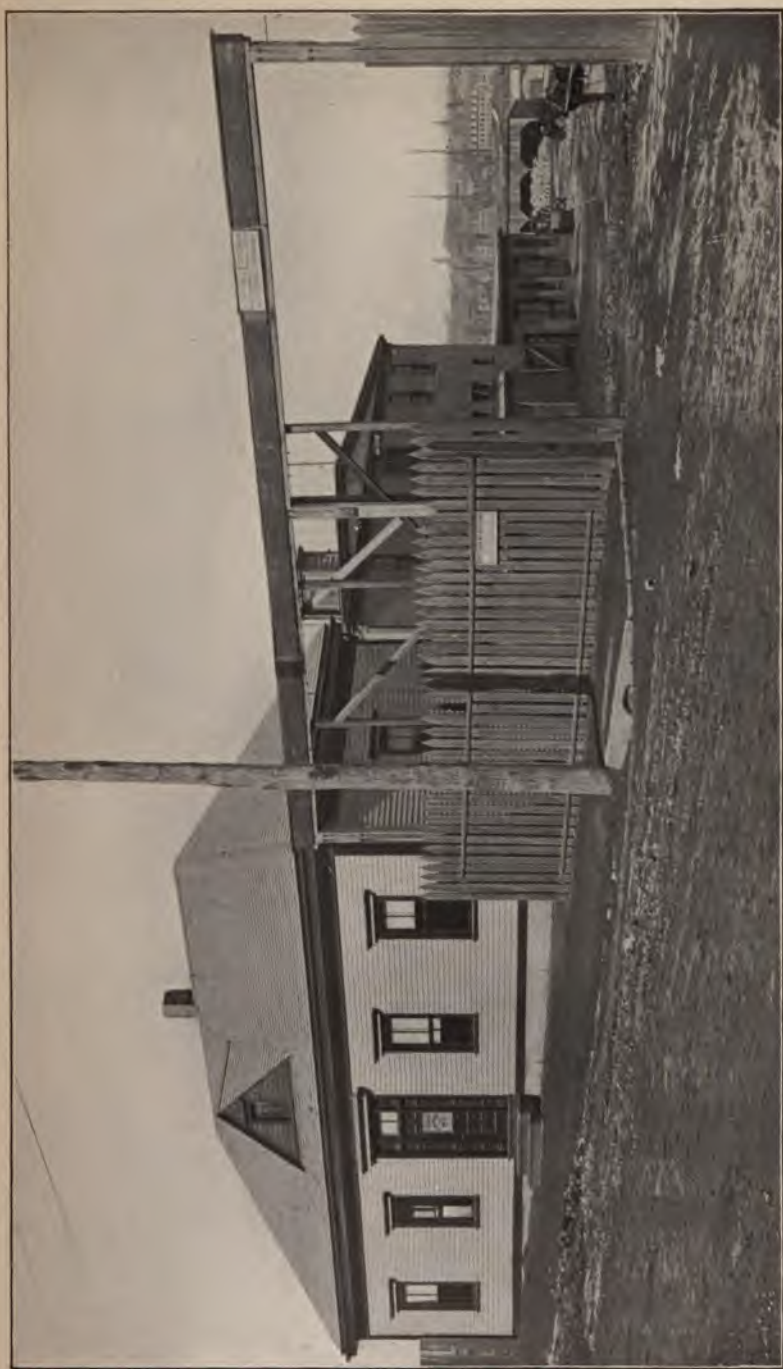
A purchase of a lot of land on Chelsea street, East Boston, was made previous to my incumbency of this office, and a stable designed to be placed upon it.

While this property was upon the water front it had no wharf facilities and no opportunity for any, without the expenditure of large sums of money, the land, except for a small filled area at its front, being an expanse of tidal flats.

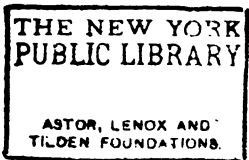
This property has been abandoned by the Department, and a wharf property, having deep water frontage and docking facilities, situated much nearer the central portion of the district, has been leased for a term of years, together with a large stable thereon; and on this property the Department has constructed sheds and offices. It now has excellent facilities thereon for the Paving, Sewer, Sanitary, and Street Cleaning Divisions.

WEST END YARD AND STABLES.

An urgent need of the Department is the construction of new stables at the North Grove-street Yard. The Board of Health and the Sanitary, Sewer and Street Cleaning Divisions of this Department occupy old brick buildings, wooden sheds, leantos and cabins, scattered over the yard, none of them fit for the purposes for which they are used. Notwithstanding the fact that there are more horses kept in this yard than in any other, the stable facilities are entirely inadequate,



STREET DEPARTMENT YARD, EAST BOSTON.



and we lose much horse service annually, from the fact that the stables are ill-constructed, ill-lighted, ill-ventilated and generally unsanitary. To provide proper storage, office-room, stable room and other facilities for the use of this Department as well as the Board of Health, a suitable building for the use of all should be erected, and I believe there is no greater need in the public service in the City to-day. This has been previously recommended by me, and an item of \$160,000 was last year placed in a loan bill for this purpose, but failed of passage.

SMOKE NUISANCE.

Much difficulty is encountered in effectively suppressing the smoke nuisance in the City, because of the inadequacy of the provisions of the present law, which now allows the emission of dark smoke for five minutes continuously. An enforcement of the law does not suppress the nuisance, but it has been attempted to confine it within the limits of the law as far as possible.

EMPLOYMENT OF LABOR.

The report of the Civil Service Clerk, showing the classification of the employees of the Department and the transfers and requisitions made for the several Divisions of the Department, will be found in Appendix K.

BRIDGE DIVISION.

Expenditures.

Maintenance.

\$138,580.56.

Specials.

\$6,470.37.

The Bridge Division has made more than usually extensive repairs to the floors and decks of the bridges in its care.

Especial attention has been given to scraping and painting the iron-work underneath those bridges spanning railroad tracks, which have been long neglected, and where the gases from locomotives bring about rapid deterioration.

Financial provision was made at the request of this Department for repairs to the piers and structures of several tide-water bridges, but much of this work has been prevented, owing to the attitude of the Harbor and Land Commissioners, as they refused to issue permits in Fort Point channel, pending action on the widening of the water-ways.

Plans are in preparation for the construction of a stable and headquarters for the South District, upon the lot acquired by exchange with the N. Y., N. H. & H. Railroad Company on Broadway and Dorchester avenue, South Boston.

FERRY DIVISION.

<i>Expenditures.</i>	<i>Receipts.</i>
Maintenance.	\$166,830.88.
\$236,999.91.	Traffic.
Specials.	12,243,877 foot passengers.
\$104,973.55.	931,853 teams.

The Ferry Division has added to its service two new propeller boats, thus enabling it to keep one additional boat in commission during the year, and dispose of the old side wheeler boat "Winthrop," which has been in service since 1873.

Plans have been prepared for a new head-house and coal elevator at the South Ferry, East Boston side. The contract has been awarded, and work is under way on the coal-pocket, and the head-house will be constructed as soon as this is completed. This has been arranged without the purchase of additional land.

Extensive repairs have been made upon boats, engines, landings and buildings.

PAVING DIVISION.

<i>Expenditures.</i>	<i>Specials.</i>
Maintenance.	
\$782,700.72	\$1,155,631.11

The Paving Division work has been rearranged; an engineering corps has been established in the Division, analogous to that in the Sewer Division, and all street construction and repair is now directly under the control of the Division.

Money is no longer provided from a loan inside the debt limit, in the reconstruction of streets, but additional appropriation from the tax levy is made for such renewals and repairs. From the amount so provided the cost of all downtown paving and Back Bay asphaltting has been paid.

The maintenance appropriation has been largely expended in an effort to bring the macadam streets, which constitute so large a portion of our street mileage, into a more satisfactory condition, and the work of construction of new streets laid out under Chapter 323 of the Acts of 1891 and the amendments thereto has rapidly progressed. Money is at hand and plans prepared for the practical completion of all streets now so laid out and ordered constructed during the coming year.

The Division has charge of the maintenance and construction of about 492 miles of streets.



DOUBLE SCREW PROPELLER FERRY-BOAT "GENERAL SUMNER."

THE NEW YORK
PUBLIC LIBRARY

ASTOR, LENOX AND
TILDEN FOUNDATIONS.

SANITARY DIVISION.

Expenditures.

\$609,664.67

The Sanitary Division has increased the efficiency of its construction and repair-shops where most of the horse-shoeing and construction and repair of the vehicles and harnesses of the Department is done.

One new Barney dumping boat, costing \$17,500 has been purchased and paid for from the maintenance appropriation.

A loan has been provided for the establishment of a sanitary and street cleaning yard in Dorchester, which will enable the Division to make the collection in this district in a much more satisfactory manner than under the present contract system.

SEWER DIVISION.

Expenditures.

Maintenance.	Sewerage Works.	Stony Brook Improvement.
\$362,060.24	\$921,140.48	\$198,481.35

The Sewer Division has expended a large portion of the one million dollars, annually provided for sewer construction, upon large and important works, principally surface drains and in the construction of the necessary house and surface drainage required by law, in the "323" streets so called, under construction.

The reservoirs of Moon Island have been practically completed, the Dorchester Bay Pumping Station repairs and alterations to engines and boilers have been completed, and payments approximating \$100,000, have been made upon the new engine No. 5 for this plant now in course of construction at Philadelphia.

Stony brook conduit has been extended 1,018 running feet, and a supplementary channel constructed in Boylston avenue to Green street.

Especial attention has been given to the care and cleaning of catch-basins, large numbers of which had been long neglected.

STREET CLEANING DIVISION.

Expenditures.

\$339,747.23

The Street Cleaning Division has changed its methods, and furnished better results than formerly.

The patrol system has been increased, and an attempt has been made to keep otherwise clean streets free from paper litter, by the establishment of a system of paper teams.

The establishment of the Sanitary and Street Cleaning headquarters in Dorchester, before referred to, will enable the Division to give this district the increased service it has so long required.

STREET WATERING DIVISION.

Expenditures.

\$174,742.45

The Street Watering Division has endeavored to water all of the public streets during the year, an increase of $36\frac{1}{2}$ miles over the amount formerly watered.

This work has been assessed under authority of Chapter 366 of the Acts of 1899, but, during the coming year, in accordance with Your Honor's recommendation and the subsequent action of the City Government, the cost of street watering will be paid from the tax levy without assessment upon the abutter.

BOSTON AND CAMBRIDGE BRIDGES.

Expenditures.

\$17,353.27

Upon the Cambridge Commissioner, Mr. William J. Marvin, the responsibility for the Boston and Cambridge bridges has largely fallen, and to him should be accorded the credit for the excellent and economical manner in which they have been maintained.

SUMMARY OF WORK DONE.

BRIDGE DIVISION.

Overhauled and thoroughly repaired the following bridges, viz.:

Allston, Blakemore street, Chelsea (north), Dover street, Massachusetts avenue (over the B. & A. R.R.), Mattapan, Swett street (east of the N. Y., N. H. & H. R.R.), Warren and Winthrop.

Scraped and painted ironwork on the following, viz.:

Albany street, Athens street, Brookline avenue, Dartmouth street, Gold street, and Neponset.

Rebuilt sidewalks on Beacon street (over waterway), Dartmouth street, Federal street, West Fourth street, Milton and Malden bridges.

Repaved roadway on Congress-street bridge.

Built two shelter houses on Summer-street bridge.

FERRY DIVISION.

One propeller ferry-boat, "General Sumner," was built and put into commission during the year. Six ferry-boats have been running on full time during the entire year.

The engines of the ferry-boats "Governor Russell," "Noddle Island," and "Revere" have been thoroughly overhauled, and are now in good working order.

The canopies, gates, and drops on both sides of the North Ferry and the head-house, on the Boston side, have been painted, and the piers at three of the landings have been repaired, and are now in good condition.

The North Ferry head-house, Boston side, has been wired, and lighted with incandescent lights.

PAVING DIVISION.

Granite block paving, laid as follows :

On concrete base, with grout joints .	22,996	square yards
" " " " pitch joints .	12,288	" "
" " " " gravel joints .	256	" "
On gravel base, with grout joints .	453	" "
" " " " pitch joints .	1,079	" "
" " " " gravel joints .	4,747	" "
Granite block paving relaid .	222,784	" "
Gutter paving laid .	14,986	" "
Wooden block paving laid on concrete base (gravel joints) .	1,367	" "
Edgestones, set or reset .	327,659	linear feet

Sidewalks built as follows :

Artificial stone .	243,632	square feet
Brick, laid or relaid .	163,806	square yards
Coal tar concrete .	2,222	" "
Crushed stone .	12,426	" "
Flagging crosswalks laid .	4,095	" "
Asphalt pavement, laid and relaid .	30,670	" "
Macadam surface (new) .	46,539	" "
Telford base (new) .	1,989	" "
Macadam resurfacing .	551,869	" "

Work has progressed on forty-six (46) streets and two (2) public alleys laid out and ordered constructed under Chapter 323 of the Acts of 1891, and amendments, and thirty-two (32) streets, and two (2) public alleys have been completed.

SANITARY DIVISION.

Collected and removed three hundred forty-four thousand, six hundred and eight-two (344,682) loads of house dirt and ashes, eighteen thousand, four hundred and sixty (18,460) loads of waste and rubbish and sixty-two thousand, nine hundred and seventy-five (62,975) loads of house offal.

Purchased one (1) new Barney dumping boat and equipped the repair-shops with new machinery and electric power.

SEWER DIVISION.

Built seventeen and nine-tenths (17.9) miles of sewers, and 377 catch-basins, flushed one hundred and ninety-nine (199) miles of sewers, removed eighteen hundred and sixty-eight (1,868) cubic yards of deposit from sewers, and thirteen thousand two hundred and forty-two (13,242) cubic yards from the pumping station; cleaned eleven thousand one hundred and forty (11,140) catch-basins removing thirty thousand seven hundred and seventy-three (30,773) cubic yards of deposit.

STREET-CLEANING DIVISION.

Cleaned seventeen thousand five hundred and sixty-one (17,561) miles of paved streets and gutters, removed two hundred forty-four thousand six hundred and ninety-three (244,693) loads of street sweepings, etc., and emptied fifteen thousand seven hundred and eighty-two (15,782) public waste barrels.

STREET-WATERING DIVISION.

Watered four hundred and fifty (450) miles of streets.

Financial Statement of the Street Department Appropriation.

February 1, 1900, to January 31, 1901.

Maintenance.

APPROPRIATION.	Appropriations and Transfers during 1900.	Revenue.	Total Credits.	Expenditures for the twelve months ending January 31, 1901.	Balances, January 31, 1901.
Street Department:					
General Office.....	\$20,000 00	.....	\$20,000 00	\$19,994 66	95 34
Bridge Division.....	\$159,014 47	.....	159,219 92	138,580 56	20,639 36
Rocks and Cambridge Bridges.....	\$18,500 00	\$205 45	18,500 00	17,353 27	1,146 73
Kew-Forest Division.....	\$257,000 00	.....	257,000 00	236,969 91	20,030 09
Paving Division.....	\$780,000 00	.....	782,700 72	782,700 72	.....
Sanitary Division.....	\$604,238 30	2,700 72	609,664 67	609,664 67	.....
Sewer Division.....	\$300,000 00	5,436 37	302,118 85	302,060 24	58 61
Street Cleaning Division.....	\$339,747 23	12,118 85	339,747 23	339,747 23	.....
Street Watering Division.....	\$175,000 00	.....	175,000 00	174,742 45	257 55
Totals.....	\$2,688,500 00	\$30,451 39	\$2,703,951 39	\$2,681,843 71	\$22,107 68
1 Appropriation, 1900-1901.....	\$20,000 00	.....	\$18,500 00	7 Appropriation, 1900-1901, Work Done for Corporations.....	12,118 85
2 Appropriation, 1900-1901.....	\$173,000 00	.....	\$237,000 00	8 Appropriation, 1900-1901, Transferred from Bridge Division.....	\$339,747 23
Repairing for corporations, 205 45	\$173,205 45	.....	\$173,205 45	9 Appropriation, 1900-1901.....	\$175,000 00
Transferred to Street Cleaning Division, \$9,747 23	\$9,747 23	.....	\$9,747 23	10 Transferred to City Treasury.	.....
Transferred to Sanitary Division.....	.....	.....	.....
Sanitary Division.....	.....	.....	.....
Totals.....	13,985 53	.....	\$69,664 67		
	\$159,219 92	.....		

Comparative Table showing Cost of Maintenance of the Street Department since Organization.

DIVISION.	1891-92. (13 months.)	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
Central Office	\$16,050 00	\$18,793 60	\$20,805 96	\$20,884 29	\$18,315 79	\$18,781 85	\$17,789 95	\$19,186 24	\$18,790 41	\$19,994 66
Bridge	123,010 63	128,954 37	133,159 24	130,137 21	119,716 00	119,963 55	126,629 32	129,253 03	120,408 72	138,580 56
Boston and Cam- bridge Bridges...	11,866 42	11,079 76	11,493 16	11,986 85	12,537 33	13,835 54	14,403 92	13,569 89	15,998 18	17,353 27
Ferry .....	.....	.....	.....	.....	200,911 30	218,353 10	219,983 24	213,055 79	211,822 87	236,999 91
Paving	770,525 54	855,270 79	593,738 19	637,226 91	599,060 34	559,934 39	573,963 14	553,291 72	705,432 68	753,562 34
Removal of Snow	102,410 86	60,190 20	151,943 33	78,381 71	84,899 08	68,741 07	116,224 20	172,963 48	154,625 18	29,138 38
Sanitary	2,509,242 24	469,370 74	481,300 63	467,459 02	432,778 52	477,241 54	492,670 56	508,132 88	567,107 81	609,684 67
Sewer	446,222 69	569,608 19	373,517 38	304,133 40	280,596 07	276,615 25	295,622 25	337,376 27	347,133 64	362,060 24
Street Cleaning	215,929 33	288,320 42	308,707 30	391,477 44	395,908 50	310,266 39	309,993 38	316,052 73	322,951 15	339,747 23
Street Watering....	104,263 62	94,507 80	99,430 16	87,169 08	76,424 70	71,211 81	78,736 72	138,728 57	174,625 97	174,742 45
Totals	\$2,299,621 33	\$2,487,095 87	\$2,174,095 35	\$2,058,855 91	\$2,140,177 63	\$2,134,944 49	\$2,245,816 68	\$2,401,630 60	\$2,588,905 61	\$2,681,843 71

¹ Nine months only.² Includes street cleaning for four months to May 1, 1891.³ Nine months only, but includes expenditure for Street Police, May 1 to July 10, 1891 — \$464.41.⁴ For comparison, deduct Ferry Division, not shown before 1884-5.⁵ Not including water bills of \$76,530.40 not previously paid by Street Watering Division.

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OBJECT OF APPROPRIATION.	Appropriations, Balances and Transfers.	Expended from Feb. 1, 1900, to Jan. 31, 1901.	Balances on hand Jan. 31, 1901.
Congress-street bridge, reconstruction,	\$3,699 25	\$2,324 37	See Note (1)
“ “ “ repairs.....	5,000 00	\$5,000 00
Dover-street bridge, tearing out old work	2,090 00	84 00	1,916 00
Harvard-street bridge, reconstruction,	2,045 76	2 00	See Note (2)
Mt. Washington avenue bridge, repairs,	5,000 00	5,000 00
New Charlestown bridge, public land- ing	1,000 00	1,000 00
Rosseter-street steel footbridge.....	6,300 00	6,300 00
Warren bridge, redecking old piers....	4,000 00	4,000 00	
Winthrop bridge	1,000 00	60 00	940 00
Totals	\$30,045 01	\$6,470 37	\$20,156 00

Ferry Division Specials.

OBJECT OF APPROPRIATION.	Appropriations, Balances and Transfers.	Expended from Feb. 1, 1900, to Jan. 31, 1901.	Balances on hand Jan. 31, 1901.
New ferry-boats	\$13,182 60	\$8,781 81	See Note
New ferry landing (chap. 435, Acts of 1895)	148,819 61	96,191 74	\$52,627 87
Totals	\$162,002 21	\$104,973 55	\$52,627 87

Paving Division Specials.

OBJECT OF APPROPRIATION.	Appropriations, Balances and Transfers.	Expended from Feb. 1, 1900, to Jan. 31, 1901	Balances on hand Jan. 31, 1901.
Abolishment of Grade Crossings	\$476 00	\$476 00	
Atlantic avenue.....	92,800 00	67,420 38	\$25,379 62
Beacon street.....	44,300 00	28,962 34	15,337 66
Boylston street	14,400 00	14,154 87	245 13
Buildings, Chelsea street.....	14,636 10	9,108 74	5,527 36
Charlestown bridge.....	3,806 74	3,806 74	
Commercial street, Fleet street to Clinton street.....	30,300 00	92 38	30,207 62
<i>Carried forward.....</i>	\$200,718 84	\$124,021 45	\$76,697 39

Paving Division Specials. — *Concluded.*

OBJECT OF APPROPRIATION.	Appropriations, Balances and Transfers.	Expended from Feb. 1, 1900, to Jan. 31, 1901.	Balances on hand Jan. 31, 1901.
<i>Brought forward</i>	\$200,718 84	\$124,021 45	\$76,697 39
Commercial street, Prince street, across Eastern avenue.....	64,690 00	28,776 20	35,823 80
Charles street.....	892 88	318 80	See Note (1)
Commonwealth avenue, construction.	4,105 54	4,105 54	
Congress street.....	5,800 25	273 72	See Note (2)
Devonshire street.....	6,500 00	6,500 00	
Freeport street.....	5,000 00	4,223 72	776 28
Harrison avenue.....	2,600 00	12 16	2,587 84
Malden bridge.....	1,881 65	1,881 65	
Mead street.....	1,780 96		See Note (3)
Neponset avenue.....	25,500 00	371 99	25,128 01
Oliver street.....	23,200 00	23,200 00	
Retaining wall, Marcella and Centre streets.....	2,492 40	2,492 40	
Summer street.....	20,616 58	17,851 16	2,765 42
Talbot avenue.....	12,214 89	1,093 37	See Note (4)
Temple place.....	6,800 00	5,222 83	1,577 17
Temple street, tunnel.....	15,000 00		15,000 00
Tremont street.....	70,000 00	51,346 11	18,653 89
Totals	\$469,703 99	\$271,691 10	\$179,009 80

Note 1. Transferred to Street Improvements, Ward 8.....	\$574 08
" 2. " " " " " " " 7.....	5,526 53
" 3. " " " " " " " 4.....	1,780 96
" 4. " " " " " " " 20.....	6,121 52
" 4. " " Freeport street, Retaining Wall.....	5,000 00
(5) Total Transfers.....	\$19,003 09

Street Improvements.

OBJECT OF APPROPRIATION.	Appropriations, Balances and Transfers.	Expended from Feb. 1, 1900, to Jan. 31, 1901.	Balances on hand Jan. 31, 1901.
Street Improvements, Ward 1.....	\$25,000 00	\$21,005 55	\$3,994 45
" " " 2.....	25,000 00	8,784 15	16,215 85
" " " 3.....	25,000 00	6,120 40	18,879 60
" " " 4.....	20,780 96	3,262 61	23,518 35
" " " 5.....	25,000 00	9,039 05	15,960 95
" " " 6.....	25,000 00	10,518 12	14,481 88
" " " 7.....	31,901 41	13,193 21	18,708 20
" " " 8.....	25,574 03	6,951 78	18,622 30
" " " 9.....	25,000 00	14,352 85	10,647 15
" " " 10.....	25,000 00	25,000 00	
" " " 11.....	25,000 00	25,000 00	
" " " 12.....	25,000 00	25,000 00	
" " " 13.....	25,000 00	6,598 26	18,401 74
" " " 14.....	25,000 00	22,484 19	2,515 81
" " " 15.....	25,000 00	16,530 48	8,469 52
" " " 16.....	25,000 00	25,000 00	
" " " 17.....	25,000 00	25,000 00	
" " " 18.....	25,000 00	25,000 00	
" " " 19.....	25,000 00	25,000 00	
" " " 20.....	31,121 52	28,425 03	2,696 49
" " " 21.....	25,000 00	25,000 00	
" " " 22.....	25,000 00	18,777 22	6,222 78
" " " 23.....	25,000 00	25,000 00	
" " " 24.....	27,043 76	18,341 63	8,702 13
" " " 25.....	25,000 00	25,000 00	
Totals.....	\$642,421 73	\$454,384 53	\$188,037 20

Sewer Division Specials.

OBJECT OF APPROPRIATION.	Appropriations, Balances and Transfers.	Expended from Feb. 1, 1900, to Jan. 31, 1901.	Balance on hand Jan. 31, 1901.
Sewerage Works.....	\$957,533 17	\$921,140 48	\$36,392 69
Stony Brook Improvement, Chapter 397, Acts of 1899	198,481 35	198,481 35	
Totals.....	\$1,156,014 52	\$1,119,621 83	\$36,392 69

Sanitary and Street-Cleaning Divisions Special.

OBJECT OF APPROPRIATION.	Appropriation, Balance and Transfer.	Expended from Feb. 1, 1900, to Jan. 31, 1901.	Balances on hand Jan. 31, 1901.
Land and Buildings, Sanitary and Street Cleaning Divisions, Dorchester	\$75,000 00		\$75,000 00
Totals.....	\$75,000 00		\$75,000 00

Laying-Out and Construction of Highways.*Expenditures.*

Street construction, general	\$83,419 21
“ “ Charlestown street	1,078 10
Total	<u>\$84,497 31</u>

Brighton.

Street construction	<u>\$11,800 23</u>
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Dorchester.

Street construction	<u>\$112,872 71</u>
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East Boston.

Street construction	<u>\$62,934 32</u>
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Roxbury and West Roxbury.

Street construction	<u>\$70,337 07</u>
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Blue Hill and other Avenues.*Expenditures, Street Construction.*

Blue Hill avenue	\$2,947 64
Columbus avenue	174 00
Commonwealth avenue	55,555 62
Total	<u>\$58,677 26</u>

South Union Station.*Expenditure.*

Street construction	<u>\$28,556 98</u>
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**Recapitulation of Expenditures for the Twelve Months Ending
January 31, 1901.**

OBJECT OF APPROPRIATIONS.	Current Expenses.	Special Appropriations.	Totals.
Street Department:			
Central Office	\$19,994 66	.....	\$19,994 66
Bridge Division.....	138,580 56	\$6,470 37	145,050 93
Boston and Cambridge Bridges.....	17,353 27	.....	17,353 27
Ferry Division.....	236,999 91	104,973 55	341,973 46
Paving Division.....	782,700 72	271,691 10	1,054,391 82
Sanitary Division.....	609,664 67	.....	609,664 67
Sewer Division.....	362,060 24	1,119,621 83	1,481,682 07
Street Cleaning Division.....	339,747 23	.....	339,747 23
Street Watering Division.....	174,742 45	.....	174,742 45
Street Improvements.....	.....	454,384 53	454,384 53
Laying-Out and Construction of Highways.....	.....	84,497 31	84,497 31
Laying-Out and Construction of Highways (Brighton).....	.....	11,800 23	11,800 23
Laying-Out and Construction of Highways (Dorchester).....	.....	112,872 71	112,872 71
Laying-Out and Construction of Highways (East Boston).....	.....	62,934 32	62,934 32
Laying-Out and Construction of Highways (Roxbury and West Roxbury).....	.....	70,337 07	70,337 07
Blue Hill and other Avenues.....	.....	58,677 26	58,677 26
South Union Station.....	.....	28,556 98	28,556 98
Totals.....	\$2,681,843 71	\$2,886,817 26	\$5,068,660 97

**List of Contracts from February 1, 1900, to January 31, 1901,
made by the Street Department.**

Paving Blocks.

CONTRACT.	Awarded to	Dated	Price per M. delivered on wharves.
Large paving-blocks, 500,000....	Rockport Granite Co...	Feb. 28, 1900....	\$59 60
Philadelphia paving-blocks, 500,000.....	Rockport Granite Co...	Feb. 28, 1900....	56 90

Bank Gravel and Sand.

DISTRICT.	Awarded to	Dated	PRICE, DOUBLE LOAD OF 40 CUBIC FEET.	
			Gravel.	Sand.
South Boston.....	Old Colony Sand and Brick Co.....	Feb. 21, 1900....	\$1 50	\$1 36
East Boston.....	Old Colony Sand and Brick Co.....	Feb. 21, 1900....	1 75	1 75
Charlestown	P. O'Riorden.....	Feb. 21, 1900....	1 40	1 10
Brighton.....	John O'Brien and Son.....	Feb. 21, 1900....	1 43	1 58
West Roxbury.....	John A. Whitte- more's Sons.....	Feb. 21, 1900....	1 10	1 00
Dorchester.....	Old Colony Sand and Brick Co.....	Feb. 21, 1900....	1 45	1 50
Roxbury.....	Old Colony Sand and Brick Co.....	Feb. 21, 1900....	1 35	1 45
City Proper.....	Charles J. Jacobs..	Feb. 21, 1900....	1 35	1 35
Districts 8 and 9.....				
City Proper.....	P. O'Riorden.....	Feb. 21, 1900....	1 30	1 10
District 10.....				

NOTE. — Single loads to cost one-half of the foregoing prices.

Crosswalk Flagging.

CONTRACT.	Awarded to	Dated	PRICE PER SQUARE FOOT.	
			On Wharves	On Streets
Granite.....	S. & J. R. Lombard....	Feb. 28, 1900....	\$0 29½	\$0 31½
North River	J. J. Cuddihy	Feb. 28, 1900....	28½	31½

Spruce Lumber.

DISTRICT.	Awarded to	Dated	Price per M. ft. B. M. rough.
South Boston	George L. Pearson	Feb. 19, 1900....	\$18 00
East Boston.....	George L. Pearson	Feb. 19, 1900....	18 00
Charlestown	George L. Pearson	Feb. 19, 1900....	17 50
Brighton	George L. Pearson	Feb. 19, 1900....	18 50
West Roxbury.....	George L. Pearson	Feb. 19, 1900....	19 00
Dorchester	George L. Pearson	Feb. 19, 1900....	18 50
Roxbury	George L. Pearson	Feb. 19, 1900....	18 50
City Proper.....	George L. Pearson	Feb. 19, 1900....	17 50

NOTE. — For each 1,000 feet of planed lumber the sum of ten (10) % additional to above prices.

Beach Gravel.

DISTRICT.	Awarded to	Dated	Price per ton, delivered on wharves.
City wharves.....	James F. McIntosh....	Feb. 21, 1900....	\$0 59

Iron Castings.

CONTRACT.	Awarded to	Dated	Price per 100 lbs.
Iron castings	The Sessions Foundry Company	Feb. 8, 1900....	\$1 55

Coal.

CONTRACT.	Awarded to	Dated	Price per ton, 2,240 lbs.
2,000 tons, Ferry Wharves	John Morrison.....	March 8, 1900...	\$3 50
1,500 tons, Pumping Station, Dorchester	John Morrison.....	March 15, 1900..	3 80
1,500 tons, Ferry Wharves	Garfield and Proctor Coal Co	May 11, 1900....	3 45
1,200 tons, Pumping Station, Dorchester	John Morrison.....	May 16, 1900....	3 30
7,000 tons, Ferry Wharves.....	John Morrison.....	July 19, 1900....	3 35
1,500 tons, Pumping Station, Dorchester	Garfield and Proctor Coal Co.....	July 30, 1900....	3 33
1,000 tons, Pumping Station, Dorchester	John Morrison.....	Dec. 22, 1900....	3 50
200 tons, Anthracite, Pumping Station, Lyons st.	Marston Coal Co...	Dec. 28, 1900....	5 99
1,000 tons, Pumping Station, Dorchester	Garfield and Proctor Coal Co.....	Dec. 29, 1900....	3 45

Leasing Ledge Lots.

CONTRACT.	Awarded to	Dated	Price per ton for stone removed.
Lease of ledge on Ifley and Montebello Roads	W. A. Mosman	April 2, 1900..	\$0 12½
Lease of ledge on Centre st., between Allandale and Walter sts.	Joseph H. Rowe....	April 20, 1900.	0 18
Lease of ledge on Kenney st., near Day st.	James W. Kenney.	June 9, 1900 ..	0 17
Lease of ledge on Ifley and Montebello Roads and Washington st	W. A. Mosman.....	Nov. 17, 1900..	0 12½

Quarrying and Cutting Stone, etc.

CONTRACT.	Awarded to	Dated	Price.
Quarrying stone from ledge on Centre st., between Allan- dale and Walter sts.	Edward V. Allen	May 14, 1900.....	\$0.80 per ton.
Excavating, breaking and loading stone from Barry st.	F. E. McCarthy Company	June 6, 1900	1.80 per cubic yard.
Quarrying and cutting stone and feeding crusher from ledge on Ifney and Montebello roads.....	Edward V. Allen	August 18, 1900.....	0.93 per ton.

Lease of Land, etc.

CONTRACT.	Lessor.	Dated	Terms.
Lease of stable, sheds, etc., at Old Harbor wharf, on the easterly corner of Vale and Burnham sts.	Charles T. Gallagher, Trustee ...	April 20, 1900.....	\$850 per year for 5 years.
Lease of easterly half stable, sheds, etc., at Old Harbor wharf, corner of Vale and Ninth sts.....	Charles T. Gallagher, Trustee ...	April 20, 1900.....	850 per year for 5 years.
Lease of land and flats at Jeffries Point, East Boston, for maintaining a public landing	G. C. Fitzpatrick	May 1, 1900.....	300 per year.
Lease of a portion of Glendon wharf and stable on said wharf.....	Blodgett & Whidden	May 14, 1900.....	3,000 per year and all taxes for 10 yrs.
Lease of a portion of Packard's wharf.....	Widow and Heirs of Henry C. Snow.....	June 20, 1900 .	4,000 per year for 10 years.
Lease of Slate wharf, Commercial st.	Theodore W. Brett.....	August 10, 1900.....	5,500 per year and water rates.
Lease of land near Bartlett ave. .	N. Y., N. H. & H. R. R. Co.....	January 7, 1901.....	5 per year.

Collecting and Removing Ashes.

CONTRACT.	Awarded to	Dated	Price.
Collecting and removing ashes, etc., in the South Dorchester District.....	John McShane.....	March 8, 1900.....	\$4,150 per year for two years.
Collecting and removing ashes, etc., in the North Dorchester District	John McShane.....	March 30, 1900.....	6,000 per year for two years.

Collecting and Removing House Offal.

CONTRACT.	Awarded to	Dated	Price.
Collecting and removing house offal, etc., East Boston District	T. Mulligan	February 20, 1900	\$8,000 per year for one year.
Collecting and removing house offal, etc., Dorchester District	David M. Biggs.....	April 28, 1900.....	6,650 per year for two years.

Furnishing Filling.

CONTRACT.	Awarded to	Dated.	Price.
Furnishing filling Swett st.....	N.Y., N.H. & H. R.R.....	July 5, 1900.....	Not to exceed \$0.05 per cubic yard, and reasonable cost for use of equipment.
Furnishing filling Bennington st.....	W. O. Seaward.....	September 15, 1900.....	(A) \$0.35; (B) \$0.70.
Furnishing filling Bennington st.....	Thomas Eccles.....	September 15, 1900.....	(A) .35; (B) .70.
Furnishing filling Bennington st.....	Eugene H. Bailey.....	September 15, 1900.....	(A) .35; (B) .70.

EXPLANATION OF LETTERS.

(A) Price per single load of twenty (20) cubic feet. (B) Price per double load of forty (40) cubic feet.

Ferry-boat No. 4.

CONTRACT.	Awarded to	Dated.	Price.
Four pumps for double-screw Ferry-boat No. 4.....	The Knowles Steam Pump W'ks.	February 20, 1900... ..	\$1,570 00
Electric Plant for double-screw Ferry-boat No. 4.....	Hawks Electric Company	March 16, 1900.....	3,490 00
Non-heat conducting covering for double-screw Ferry-boat No. 4.....	C. W. Trainer Mfg. Company ...	July 13, 1900.....	595 00

Paving and Regulating.

CONTRACT.	Awarded to	Dated.	Cost of contract as per estimated quantities, not including materials furnished by the City.
Devonshire st., State st., across Water st.....	J. B. O'Rourke.....	August 25, 1900.....	\$2,033 05
Atlantic ave., Oliver st., across India sq.....	Jones & Meehan.....	September 17, 1900.....	15,006 00
Atlantic ave., India sq., across Clinton st.....	D. Kiley.....	September 17, 1900.....	16,055 20
Atlantic ave., Clinton st., to Eastern ave.....	D. F. O'Connell.....	September 17, 1900.....	13,956 70
Commercial st., Fleet st., across Clinton st.....	John Turner & Co.....	September 17, 1900.....	12,738 60
Commercial st., Eastern ave., across Hanover st.....	H. Gore & Co.....	September 17, 1900.....	15,808 20
Commercial st., Hanover st., across Hull st.....	A. A. Libby & Co.....	September 17, 1900.....	21,269 50
Oliver st., Atlantic ave., to Milk st.....	James Doherty.....	September 17, 1900.....	12,162 90
Summer st., Washington to Federal sts.....	J. B. O'Rourke.....	September 24, 1900.....	11,695 10
Tremont st., westerly half, Temple pl. to Hamilton pl. and intersection of Beacon, School, and Tremont sts.....	United States Wood Preserving Company.....	September 25, 1900.....	3,277 50
Neponset ave., easterly side, between Adams and Minot sts.	D. F. O'Connell.....	October 4, 1900.....	4,973 50
Province ct., from Province st. about 165 feet easterly.....	Jones & Meehan.....	October 11, 1900.....	594 60
Public alley, No. 432, between Commonwealth ave. and Newbury st., from Fairfield to Gloucester sts.....	E. S. Fogarty.....	October 34, 1900.....	849 20
Public alley, No. 433, between Newbury and Boylston sts., from Clarendon to Dartmouth sts.....	E. S. Fogarty.....	November 12, 1900.....	1,040 00

1 Artificial Stone Sidewalks.

CONTRACTOR.	Dated	Price per square foot.	CONTRACTOR.	Dated.	Price per square foot.
Barnes-Ruffin Company	April 23, 1900.	6 cts.	P. J. Lyons	May 7, 1900....	6 cts.
Simpson Bros. Corporation	April 23, 1900.	6 cts.	Warren Bros. Company	May 14, 1900....	6 cts.
W. A. Murtfeldt Company	April 23, 1900.	6 cts.	H. P. Nawn	May 31, 1900....	6 cts.
Thomas J. Hind	April 23, 1900.	6 cts.	W. L. Cahalan	June 6, 1900....	6 cts.
Taylor, Carr & Andrews	April 23, 1900.	6 cts.			

¹ These walks are guaranteed by a surety company bond for ten (10) years from date of completion and were laid on various public streets where the contractor had agreements with the abutters.

Furnishing and Laying Artificial Stone Sidewalks.

CONTRACT.	Awarded to	Dated	Price per square foot.
Oakview terrace, from Centre st. to about 860 feet south-easterly	P. J. Lyons	May 14, 1900....	\$0.17 $\frac{1}{2}$
Florida st., between Lonsdale and Templeton sts.	Warren Bros. Company	June 8, 1900....	0.15 $\frac{1}{2}$
Warner st., between Harvard and Park sts.	Warren Bros. Company	June 8, 1900....	0.15 $\frac{1}{2}$
Esmond st., between Blue Hill ave. and Harvard st.	Warren Bros. Company	June 8, 1900....	0.15 $\frac{1}{2}$
Stratford st., between Anawam and Clement aves.	Wm. L. Cahalan	June 21, 1900....	0.15 $\frac{1}{2}$
Aberdeen st., between Beacon st. and the B & A. R.R.	Taylor, Carr & Andrews	August 28, 1900....	0.15
Lauriat ave., between Ballou ave. and Norfolk st.	W. A. Murtfeldt Company	September 21, 1900....	0.18
Montague st., between Ashmont and Roslin sts.	Simpson Bros. Corporation	October 5, 1900....	0.18 $\frac{1}{2}$
Nottingham st., between Bullard st. and Bowdoin ave.	W. A. Murtfeldt Company	October 5, 1900....	0.19 $\frac{1}{2}$
Van Winkle st., between Dorchester ave. and the Shawmut Branch Railroad	Simpson Bros. Corporation	October 5, 1900....	0.19 $\frac{1}{2}$
Tremont st., easterly side, between Mason and School st.	Simpson Bros. Corporation	October 25, 1900....	0.19

Paving with Trinidad Asphalt.

CONTRACT.	Awarded to	Dated	Price.
Congress sq., from about 85 feet south of State st. for a distance of about 140 feet southerly, thence 60 feet easterly to Congress st.	The Barber Asphalt Paving Company	May 23, 1900	(B) \$2 per square yard; (C) \$5 per cubic yard.
Temple pl., between Washington and Tremont sts.	United States Paving Company ..	August 24, 1900	(E) \$3.05 per square yard.
Tremont st., between Scollay sq. and Boylston st.	The Barber Asphalt Paving Company	September 8, 1900	(B) \$2.50 per square yard; (C) \$4.50 per cubic yard.
Harrison avenue, between Davis and Asylum sts.	The Barber Asphalt Paving Company	September 8, 1900	(A) \$3.25 per square yard; (B) \$2.50 per square yard; (D) \$5 per cubic yard.
Trinity pl., between Stuart and Stanhope sts.	The Barber Asphalt Paving Company	September 29, 1900	(A) \$3.25 per square yard; (B) \$2.50 per square yard.
Mason st., from Tremont st., about 85 feet easterly.	The Barber Asphalt Paving Company	October 10, 1900	(A) \$3.25 per square yard; (B) \$2.50 per square yard.

EXPLANATION OF LETTERS.

(A) Furnishing and laying a 6-in. American cement concrete base, an 1½-in. wearing surface, and an 1½-in. binder, and guaranteeing the same for a period of ten (10) years after completion. (B) Furnishing and laying a 3-in. wearing surface and an 1½-in. binder on existing concrete base, and guaranteeing the same for a period of ten (10) years after completion. (C) Furnishing and laying a 6-in. American cement concrete base between the rails and tracks of the Boston Elevated Railway Company. (D) Furnishing and laying a 6-in. American cement concrete base and 1½-in. wearing surface, and an 1½-in. binder for Trinidad land asphalt, and guaranteeing the same for a period of ten (10) years after completion.

Paving with Sicilian Rock Asphalt.

CONTRACT.	Awarded to	Dated	Price.
Beacon st., between Arlington and Dartmouth sts.....	Boston Asphalt Company.....	September 1, 1900.....	(A) \$3.25 per square yard. (B) \$2.50 per square yard.
Boylston st., from Easterly side of Arlington st., to Berkeley st.....	Boston Asphalt Company.....	September 1, 1900.....	(A) \$3.25 per square yard. (B) \$2.50 per square yard. (C) \$5 per cubic yard.
Meridian st., between Trenton and Eutaw sts.....	Jones & Meehan.....	October 18, 1900.....	(A) \$3.25 per square yard. (D) \$1.90 per square yard.
Prince st., from Salem st., to about 210 feet toward Hanover st.....	Jones & Meehan.....	November 2, 1900.....	(A) \$3.25 per square yard. (E) \$0.37 per square yard. (F) \$0.25 per linear foot. (G) \$0.30 per square yard. (H) \$0.40 per square yard.

EXPLANATION OF LETTERS.

(A) Furnishing and laying a 6-in. American cement concrete base, and a 2-in. wearing surface and guaranteeing same for ten (10) years after completion.
 (B) Furnishing and laying a 2-in. wearing surface on existing concrete base, and guaranteeing the same for period of ten (10) years after completion.
 (C) Furnishing and laying a 6-in. American cement concrete base below and between the rails of the Boston Elevated Railway Company. (D) Laying granite blocks with pitch joints on a concrete base. (E) Roadway excavation including barring up the blocks. (F) Edgestones reset including the bed.
 (G) Laying brick sidewalks including the bed. (H) Granite block paving or crosswalk flagging relaid, including the bed.

Sewer Construction under Chapter 426 of the Acts of 1897 and Amendments.

CONTRACT.	Awarded to	Dated	Cost of contract, as per estimated quantities, not including materials furnished by the City.
Drains in Stratford ave., West Roxbury.....	John Rogers.....	April 6, 1900.....	\$1,054 50
Conduit and pipe drain in Tenean creek, north branch, between Josephine and Leroy sts.....	Booth & Co.....	April 11, 1900.....	1,004 26
Brick conduit, house drains and catch-basin drains in Van Winkle st.....	D. F. O'Connell.....	April 17, 1900.....	4,569 40
Sewers and drains in Aberdeen st., Roxbury.....	Booth & Co.....	April 30, 1900.....	1,665 50
Sewers, catch-basins, drop inlets and drains in Shepton st., between Dorchester ave. and Florida st.....	F. E. McCarthy Company.....	May 1, 1900.....	1,370 10
Sewers and drains in Gardner st., West Roxbury.....	T. J. Young & Co.....	May 2, 1900.....	10,457 50
Sewer in Cottage park, Dorchester.....	D. F. O'Connell.....	May 7, 1900.....	1,145 00
Catch-basins and pipe drains in Humboldt ave., Homestead, Hutchins and Ruthven sts.....	D. F. O'Connell.....	May 11, 1900.....	316 00
Catch-basins and pipe drains in Cardington st., Roxbury..	D. F. O'Connell.....	May 11, 1900.....	322 00
Catch-basins and pipe drains in Kingsbury and Bainbridge sts., Roxbury.....	D. F. O'Connell.....	May 11, 1900.....	323 00
Sewers and drains in LaGrange st., West Roxbury.....	Gow & Foss.....	May 14, 1900.....	2,970 05
Brick conduit and appurtenances for the Oakland Garden fork of the Canterbury branch of Stony brook in private land, between Franklin Field and Bernard st.....	D. F. O'Connell.....	May 21, 1900.....	13,257 50
Sewers and drains in Belgrade ave. and Lorraine st., West Roxbury.....	F. E. McCarthy Company.....	May 26, 1900.....	1,834 70
Sewers and drains in Seaborn st., between Moultrie ave. and Kenwood st., Dorchester.....	Booth & Co.....	June 1, 1900.....	345 00
Stony brook conduit in Boylston ave., between Cornwall and Green sts., West Roxbury.....	Jones & Meehan.....	June 2, 1900.....	15,913 75

Sewers and drains in Massachusetts ave., Dorchester.....	D. F. O'Connell.....	June 6, 1900.....	3,783 50
Catch-basins and drains in Dunford st., Roxbury.....	D. F. O'Connell.....	June 8, 1900.....	291 00
Sewers and drains in Washington st., between Morton and Tower sts., West Roxbury.....	Gow & Foss.....	June 27, 1900.....	983 00
Sewers and drains in Selden st., between Capen st. and Milton ave., Dorchester.....	John McMorrow.....	June 28, 1900.....	2,274 50
Sewers and drains in Kenwood road and Kempton st., Roxbury.....	John H. Crane.....	July 3, 1900.....	745 75
Sewers and drains in Perkins st., West Roxbury.....	D. E. Lynch.....	July 14, 1900.....	4,401 00
Brick sewer and appurtenances in private land, formerly Blake st., between Dorchester ave. and Boston st.	Gow & Foss.....	July 28, 1900.....	3,139 85
Sewers and drains in Barry st., Dorchester.....	F. E. McCarthy Company.....	October 2, 1900.....	2,068 25
Brick conduit in Lyons st., from Callender st. 200 feet toward Franklin Field ditch, Dorchester.....	D. F. O'Connell.....	October 26, 1900.....	5,946 50
Sewers and drains in Westbourne and Cornell sts., West Roxbury.....	Gow & Foss.....	October 31, 1900.....	1,910 00
Conduit in Tenean Creek (North Branch), between Charles and Josephine sts., Dorchester.....	Gow & Foss.....	December 11, 1900.....	1,074 70
Conduit in Tenean Creek (North Branch), between Leroy and Westville sts., Dorchester.....	Gow & Foss.....	December 11, 1900.....	1,437 25
Sewers and drains in Moseley st., Dorchester.....	Thos. O'Leary.....	January 15, 1901.....	1,599 80
Sewers and drains in Forest Hill st., between Washington st. and Glen Road, West Roxbury.....	John McMorrow.....	January 17, 1901.....	7,697 45
Sewers and drains in Millet st., Dorchester.....	Collins & Ham.....	January 23, 1901.....	1,090 91
Sewers and drains in Carlow st., Roxbury.....	Gow & Foss.....	January 24, 1901.....	583 00
Sewers and drains in Leonard st., Dorchester.....	D. H. Sullivan.....	January 31, 1901.....	998 60

Street Construction, under Chapter 323 of the Acts of 1891, or Special Acts or Amendments thereto.
Macadam Roads.

CONTRACT.	Awarded to	Dated	Cost of contract, as per estimated quantities, not including materials furnished by the City.
Aberdeen st., between Beacon st. and Brookline branch of the B. & A. R.R.	J. O'Brien & Son.	February 1, 1900.	\$1,580 40
Echo st., between Columbus ave. and Centre st.	James Doherty.	August 2, 1900.	426 35
Woodcliff st., from Howard ave. about 214 feet easterly.	Phillip Doherty.	August 2, 1900.	1,122 50
Rockford st., between Dudley and Clifton sts.	D. F. O'Connell.	August 2, 1900.	1,058 10
Van Winkle st., between Dorchester ave. and Shawmut branch railroad.	Booth & Co.	August 2, 1900.	1,383 51
Nottingham st., between Bullard st. and Bowdoin ave.	D. F. O'Connell.	August 2, 1900.	1,494 20
Fowler st., between Glenway and McLellan sts.	Booth & Co.	August 2, 1900.	896 51
Homes ave., between Bowdoin and Topliff sts.	Thomas F. Welch.	August 2, 1900.	2,374 00
Montague st., between Ashmont and Roslin sts.	Collins & Ham.	August 23, 1900.	889 81
Seaborn st., between Centre and Kenwood sts.	James Doherty.	August 28, 1900.	1,060 00
Cardington st., from Cobden st. across Fenner st.	Phillip Doherty.	August 29, 1900.	409 70
Dunford st., between Cobden and Fenner sts.	Phillip Doherty.	August 29, 1900.	441 40
Ashley st., between Breed and Walley sts.	Phillip Doherty.	September 21, 1900.	2,096 95
Washington st., between Morton and Tower sts.	Jones & Meehan.	October 17, 1900.	2,587 00
Corinth st., between Washington and Brandon sts.	Collins & Ham.	October 19, 1900.	2,163 76
Cambridge st., between Brighton ave. and Washington st.	J. H. Sullivan.	October 30, 1900.	10,070 00
Tremont st., between Washington st. and the Newton line.	William Scollana.	November 6, 1900.	4,646 70
Stratford st., between Anawan and Clement aves.	Phillip Doherty.	November 23, 1900.	2,143 95

Pile Driving.

CONTRACT.	Awarded to	Dated.	Price.
Furnishing and driving spruce piles for sewer in Traverser st., between Haverhill and Canal sts.....	John T. Scully.....	March 29, 1900.....	From subway tracks to Canal-street sewer, \$0.13 per linear foot of pile driven; under the subway tracks, \$0.20 per linear foot of pile driven.
Furnishing and driving spruce piles for sewer in E st., from West First st. to Summer-st. Extension.....	Geo. H. Cavanagh.....	June 8, 1900.....	For each pile, 15 feet or less in length, \$1.36 per pile driven; for each linear foot in excess of the 15 feet the sum of \$0.07 per linear foot.
Furnishing and driving spruce piles for sewer in Gainsborough st., between St. Stephen and Hemenway sts....	Geo. Hayes & Co.	September 24, 1900.....	\$0.20 per linear foot of pile-driven.
Furnishing and driving spruce piles in Neponset avenue, between Blackwell and Tolman streets.....	A. A. Hersey	October 25, 1900.....	\$0.14 per linear foot of pile-driven; for each pile sawed off the sum of \$0.10 per linear foot.

Repairing Ferry-boats.

CONTRACT.	Awarded to	Dated.	Price.
Painting ferry-boat "Noddle Island"	J. S. Richards.....	May 12, 1900.....	\$550 00
Painting ferry-boat "Revere"	William Duncan.....	May 23, 1900.....	450 00
Painting ferry-boat "D. D. Kelly"	William Duncan.....	June 23, 1900.....	360 00
Painting ferry-boat "General Hancock"	N. T. Gorham & Sons.....	August 13, 1900.....	340 00
Removing broken shaft, refitting new shaft, and connecting with engine on ferry-boat "D. D. Kelly", ready for use,	The Atlantic Works.....	September 20, 1900.....	900 00
Furnishing one iron shaft (spare) for ferry-boat.....	Boston Forge Company.....	November 14, 1900.....	0.06½ per lb.
Furnishing one iron shaft for ferry-boat "Revere"	Boston Forge Company.....	November 27, 1900.....	0.06½ per lb.
Removing old shaft, and refitting new shaft and connecting with engine on ferry-boat "Revere" ready for use	Bertelsen & Petersen.....	December 12, 1900.....	847 00
Repairing steam-valves, valve-chests, pistons, etc., on ferry-boat "Governor Russell"	Bertelsen & Petersen.....	December 14, 1900.....	698 00
Removing steam-chest, renewing all joints, and replacing same perfectly steam tight on ferry-boat "Revere".....	Bertelsen & Petersen.....	December 26, 1900.....	454 00

Retaining Walls, etc.

CONTRACT.	Awarded to	Dated.	Price.
Retaining wall and fence Centre street, opposite New Heath street.....	P. F. Donovan.....	July 7, 1900.....	\$4,500 00
Retaining wall along Freeport street, Dorchester.....	Collins & Ham.....	September 15, 1900.....	3,987 00
Sidewalks, walls and fences, Trinity place.....	Frank Bacheider.....	November 2, 1900.....	1,308 25

Bridge Strengthening.

CONTRACT.	Awarded to	Dated.	Price.
Sheathing roadway, Harvard bridge.....	Ross & Fowler.....	March 9, 1900.....	\$3,187 00. See note.
Building bridge to carry the N.Y., N.H. & H. R.R. Co's tracks over Columbia road, and doing incidental work....	N.Y., N.H. & H. R.R. Co.....	March 29, 1900.....	Actual cost to be paid by the City, and the railroad company is to forever maintain the bridge.
Furnishing and erecting fence on the Charlesgate, west bridge, over Ipswich street.	Boston Bridge Works.....	April 6, 1900.....	\$2,625 00.
Building roadway and sidewalk, Charlesgate, west bridge, over Ipswich street.....	W. A. Murtfeldt Co.....	September 20, 1900.....	1,998 00.
Repairing Winthrop bridge.....	W. L. Miller.....	November 30, 1900.....	3,629 87.
Repairing piers and draw Dover-street bridge.....	W. J. Lawler.....	November 30, 1900.....	2,217 22.

NOTE. — One-half (½) to be paid by the City of Cambridge.

Ferry Piers and Coal Elevator.

CONTRACT.	Awarded to	Dated.	Price.
Repairing North pier, North Ferry, East Boston side.....	Ross & Fowler.....	March 13, 1900.....	\$826 60.
Repairing Middle pier, South Ferry, Boston side.....	Geo. Hayes & Co.....	April 9, 1900.....	643 00.
Plans, specifications, etc., new ferry head-house, South Ferry, East Boston side.....	H. H. Atwood.....	October 17, 1900.....	5 per cent. of total cost.
Repairing North pier, Boston side, North Ferry.....	W. J. Lawler.....	December 17, 1900.....	\$472 89.
Erecting coal elevator, South Ferry, East Boston side.....	Geo. Hayes & Co.....	January 9, 1900.....	13,500 00.

Moon Island Construction.

CONTRACT.	Awarded to	Dated.	Price.
Slope paving and grading, Moon Island.....	Seth Perkins.....	August 24, 1900.....	(A) \$0.37; (B) \$4.00; (C) \$0.60; (D) \$3.00.
Slope paving, riprap and gravel filling, Moon Island..	Julius Nelson.....	December 29, 1900.....	(C) \$0.60; (D) \$3.00.
Building four (4) flushing gate-houses at Moon Island.....	P. McGovern.....	January 7, 1901.....	\$7,300.

(A) Earth excavation per cubic yard. (C) Gravel refill per cubic yard.

(B) Rock excavation per cubic yard. (D) Slope paving per square yard.

Engines, Boilers, Motors, etc.

CONTRACT.	Awarded to	Dated.	Price.
Reheater, lagging and fittings for Sewerage Pumping Engine No. 3.....	I. P. Morris Co.....	February 20, 1900.....	\$4,575 00.
Oiling galleries for sewerage Pumping Engines Nos. 3 and 4.....	I. P. Morris Co.....	February 27, 1900.....	2,375 00.
Installing electric motor and blower and the necessary piping to connect nine (9) forges at the shops of the Sanitary and Street Cleaning Divisions.....	William Farrell & Co.....	March 16, 1900.....	2,050 00.
Finishing and erecting in place one Improved Farrell Foundry Crushing Machine for the Mosman Crusher.....	Benj. F. Anthony & Son.....	May 29, 1900.....	\$2,181.15 and freight and carting.

Cleaning Catch-basins.

CONTRACT.	Awarded to	Dated.	Price.
Cleaning 297 catch-basins in District 1, South Boston and 298 basins in District 8, City Proper.....	F. E. McCarthy Company	December 23, 1900.....	\$3 50 each.
Cleaning 307 catch-basins in District 6, Dorchester.....	John McMorow.....	December 23, 1900.....	5 00 each.
Cleaning 107 catch-basins in District 9, and 192 basins in District 10, City Proper.....	Charles H. Chamberlain.....	December 23, 1900.....	\$3.00 each in District 9, \$3.25 each in District 10.
Cleaning 244 catch-basins in District 7, Roxbury and part of District 8, City Proper.....	Charles Duncan.....	December 31, 1900.....	\$4 25 each.
Cleaning 123 catch-basins in District 8, City Proper.....	Charles Duncan.....	December 31, 1900.....	4 00 each.

Miscellaneous Agreements.

CONTRACT.	Awarded to	Dated.	Price.
Four (4) weighing machines at ferry head-houses.....	National Automatic Weighing Machine Co.....	February 1, 1900.....	\$200 paid to the City.
Refilling street sweeping machine brooms, and furnishing push and teamsters' brooms.....	J. P. Walsh.....	March 5, 1900.....	Machine, \$10 each; push, \$5.50 doz.; teamsters', \$6 doz.
Furnishing and laying brick sidewalks and grading Sweet street in the vicinity of the railroad.....	Jones & Meehan.....	May 12, 1900.....	Brick sidewalks, 90 cents per square yard; grading, 80 cents per cubic yard.
Building (2) covered passageways (shelter houses) on Summer-street bridge.....	W. S. Sumner.....	May 23, 1900.....	\$770.

Miscellaneous Agreements. — Concluded.

CONTRACT.	Awarded to	Dated.	Price.
Furnishing and laying coal tar concrete sidewalks on Waldeck and Florida streets.....	Taylor, Carr & Andrews.....	May 28, 1900.....	New work, 67½ cents per square yard; resurfacing, 35 cents per square yard.....
Excavating material, removing trees and fences, breaking stone for crusher, and hauling stone to Rosseter-street crusher.....	Thomas O'Leary.....	July 12, 1900.....	\$1,550.
Installing machinery for removing the grease from east shaft, Squantum, without uncovering the shaft.....	W. J. Tavender.....	July 21, 1900.....	\$600, when appliance is satisfactory to the superintendent.....
Purchase of a Barney Dumping Boat.....	Barney Dumping Boat Co.....	September 26, 1900.....	\$17,500.
Repairing sidewalks on Warren bridge.....	Simpson Bros. Corporation.....	October 18, 1900.....	Resurfacing, 75 cents per square yard; new work, \$1.10 per square yard.
Sale of ferry-boat, "Winthrop".....	L. E. Lunt.....	October 26, 1900.....	\$1,210 paid to the City.
Removing three (3) houses and a brick stable from within the lines of Corinth street, West Roxbury.....	Collins & Ham.....	November 14, 1900.....	\$1,000.
Removing bridge over the old location, N. Y., N. H. & H. R.R. Co., Providence Division, and filling and surfacing Berkeley street, between Boylston street and Columbus avenue.....	N. Y., N. H. & H. R.R. Co.....	December 27, 1900.....	City to pay 20 %, and N. Y., N. H. & H. R.R. Co., 80 %.
Furnishing and installing mechanical telegraph in the tow-boat "Cormorant".....	Chas. E. Cory & Son, and O. E. Eaton.....	December 6, 1900.....	\$158.67.

List of Streets Paved with Trinidad Asphalt, Feb. 1, 1901.

City Proper.

Name.	Location.	Length.	Area.	Year Laid.
Albany st.....	80 ft. north of Broadway, across Way st.....	105	397	1899
Albany st.....	E. Concord st. to E. Springfield st...	450	2,700	1884
Andrews st.	E. Dedham st. to E. Canton st.....	216	312	1899
Arch st.....	Franklin st. to Milk st.....	426	1,267	1883-93
Ash st.....	Bennett st. to Nassau st.....	230	427	1887
Barton ct.....	Barton st. to Brighton st.....	134	186	1894
Batterymarch st....	Milk st. to Liberty sq.	150	466	1896
Beacon st.....	Charles st., across Arlington st.....	870	3,800	1891
Beacon st.....	Dartmouth st. to within 150 ft. of westerly line of Gloucester st.....	1,744	9,277	1892
Beacon st.....	150 ft., from westerly line of Gloucester st. to 68 ft. beyond westerly line of Gloucester st.	218	1,183	1898
Beacon st.....	68 feet west of Gloucester st. to Massachusetts ave.....	1,019	5,391	1893
Bennett st.....	90 ft. west of Harrison ave. to 162 ft. east of Washington... ..	180	350	1887
Bond st.....	Hanson st. to Milford st.....	192	426	1895
Boylston st.....	East side of Berkeley st., across Clarendon st.	656	3,869	1897
Brattle sq.....	Brattle st. to Elm st.	281	670	1888
Brighton st.....	Leverett st. to Allen st.....	845	1,737	1892
Brimmer st.....	Beacon st. to Pinckney st.....	1,087	3,300	1895
Broadway.....	Albany to 105 ft. west of Albany st..	105	467	1899
Castle st.....	Castle sq., easterly.....		427	1899
Cazenove st.....	Columbus ave. to 45 ft. south of Columbus ave.....	45	100	1899
Central st.....	Broad st. to Kilby st.....	313	869	1887
Chambers st.....	Green st., across Poplar st.....	460	1,061	1894
Chambers st.....	Brighton st. to Charles st.	272	604	1895
Chandler st.....	At Castle sq.		51	1899
Charles st.....	Easterly side of Fruit st., across Allen st.....	706	1,804	1899
Charter st.....	Hanover st., across Unity st.....	318	636	1894
Cherry st.....	Washington st. to Shawmut ave.	334	594	1892
Clark st.....	Hanover st. to North st.	319	614	1892
Columbus ave.....	Boston and Albany Railroad bridge, across Massachusetts ave.....	3,505	15,000	1884-87-88-91-99
Columbus ave.....	Massachusetts ave. to 301 ft. south of Camden st.....	903	5,418	1896
Carried forward,		16,083	63,403	

List of Streets Paved with Trinidad Asphalt. — *Continued.*

City Proper.

Name.	Location.	Length.	Area.	Year Laid.
<i>Brought forward,</i>		16,083	63,403	
Corning st.....	Washington st. to Shawmut ave.....	338	734	1883-96
Congress sq.....	From Congress sq. to Congress st. ..	209	400	1883- 1900
Cooper st.....	N. Margin st., across Endicott st.....	194	597	1887
Cooper st.....	Endicott st. to Charlestown st.	205	604	1887-97
Court st.....	Washington st. to Court sq.....	231	642	1891
Court sq.....	Court st. to Court st.....	665	1,883	1881-94
Dartmouth st.	Buckingham st. to B. and A. Rail- road bridge	127	580	1899
Dartmouth st.	Boylston st. to Newbury st.....	266	2,058	1894
Davis st.....	Washington st. to Harrison ave.	323	646	1892
Devonshire st.....	Milk st. to Water st.....	262	786	1899
Doane st.....	Kilby st. to Broad st.....	312	624	1881
Edinboro' st.....	Essex st. to Beach st.....	470	924	1895
Endicott st.....	Cooper, across Thacher st.	318	1,078	1884-99
Exchange pl.....	Congress st. to Kilby st.....	244	678	1887
Ferdinand st.....	At Castle sq.	37	107	1899
Groton st.....	Washington st. to Shawmut ave.....	335	558	1892
Hanover ave.....	Hanover st. to North st.....	307	266	1892
Harrison ave.....	22 ft. south of Kneeland st. to 22 ft. north of Harvard st.....	249	885	1899
Harrison ave.....	E. Newton st. to E. Springfield st....	928	2,681	1888-95
Harrison ave.....	E. Springfield st. to 90 ft. southerly,		130	1888
Hayward pl.....	Harrison ave. to Washington st.....	260	578	1898
Hollis st.....	Tremont st., towards Washington st.	276	521	1891
Hudson st.....	Beach st. to 90 ft. north of Curve st. (minus Kneeland st. and Harvard st. intersections)	1,407	3,938	1891
Kilby st.....	State st. to Milk st. (including Lib- erty sq.)	640	4,059	1881-88- 98
Laconia st.....	Washington st. to Harrison ave.	330	727	1896
LaGrange st.	Tremont st., towards Washington st.	181	355	1897
Lincoln pl.	Worcester st. to Springfield at.....	217	313	1897
Malcolm st.....	Mt. Vernon st. to Chestnut st.....	261	290	1892
Mason st.....	Tremont st., 75 ft. easterly.....	75	206	1900
Massachusetts ave.,	Columbus ave. to Tremont st. (south- erly roadway)	267	1,621	1892
Massachusetts ave.,	Tremont st. to Shawmut ave. (south- erly roadway)	470	2,934	1892
<i>Carried forward,</i>		26,487	95,806	

List of Streets Paved with Trinidad Asphalt. — *Continued.*

City Proper.

Name.	Location.	Length.	Area.	Year. Laid.
<i>Brought forward,</i>		26,487	95,806	
Massachusetts ave.,	Shawmut ave. to Washington st. (southerly roadway).....	180	994	1892
Moon st.....	North sq. to Lewis st.....	182	384	1891
N. Bennett st.	Hanover st. to Salem st.....	552	920	1883
N. Margin st.....	Stillman st. to Thacher st.....	515	1,154	1895
Oxford st.....	Beach st. to Essex st.....	430	735	1895
Parkman st.....	N. Anderson st. across Blossom st..	241	550	1898
Parmenter st.....	Hanover st. to Salem st.....	279	764	1893
Pinckney st.....	Charles st. across Brimmer st.	271	723	1895
Pine st.....	Washington st. to Harrison ave.	419	597	1896
Poplar st.....	Chambers st. to Charles st.....	1,188	2,442	1887-92
Public alley 301....	Pinckney st. to River st.....	270	400	1897
Public alley 401....	Between Huntington ave. and St. Botolph st., from Irvington st. to Garrison st.....	350	362	1899
Public alley 402....	Between Huntington ave. and St. Botolph st., from Garrison st. to W. Newton st.....	358	374	1899
Public alley 403....	Between Huntington ave. and St. Botolph st., from W. Newton st. to Cumberland st.....	355	370	1899
Public alley 417....	Between Beacon and Marlborough sts., from Exeter st. towards Fair- field st.....	115	102	.....
Public alley 419....	Between Beacon and Marlborough sts., from Dartmouth st. to Claren- don st.....	575	511	1899
Public alley 420....	Between Beacon and Marlborough sts., from Clarendon st. to Berke- ley st.....	580	515	.....
Public alley 423....	Between Commonwealth ave. and Marlborough st., from Berkeley st. to Clarendon st.....	580	516	.....
Public alley 431....	Between Commonwealth ave. and Newbury st., from Hereford st. to 83 ft. west of Gloucester st.....	312	277	1899
Public alley 437....	Between Commonwealth ave. and Newbury st., from Berkeley st. to Arlington st.	631	561	1898
Public alley 438....	Between Newbury and Boylston sts., from Arlington st. to Berkeley st..	631	561	.....
Public alley 701....	Between Union Park and Upton st., from 130 ft. east of Tremont st. to Shawmut ave.....	521	611	1899
Spring st.....	Poplar st. to Leverett st.	447	908	1895
Stevens st.....	Lincoln pl. towards Shawmut ave..	16	22	1897
<i>Carried forward.</i>		36,485	111,159	

List of Streets Paved with Trinidad Asphalt.—Continued.**City Proper.**

Name.	Location.	Length.	Area.	Year Laid.
<i>Brought forward,</i>		36,485	111,159	
Stillman st.....	Endicott st. across N. Margin st....	170	453	1892
Stoddard st.....	Howard st. to Court st.....	135	150	1892
Sun Court st.....	North st. to Moon st.....	151	218	1891
Temple pl.....	Washington st. to Tremont st.....	503	1,621	1900
Thacher st.....	Charlestown st. to Endicott st.....	203	562	1892
Tileston st.....	155 ft. west of Hanover st. across Unity st.	254	346	1887
Tileston st.....	Unity st. to Salem st.	163	124	1895
Tremont st.....	Scollay sq. to 23 ft. north of Beacon st.	460	1,586	1900
Tremont st.....	21 ft. south of Beacon st. to Boyls- ton st.....	2,317	8,784	1900
Tremont st.....	At Castle sq.	60	771	1899
Trinity pl.....	St. James st. across Stuart st.....	391	1,130	1899
Trinity pl.....	Stuart st. across Stanhope st.....	262	757	1900
Unity st.....	Charter st. to Tileston st.	330	500	1897
Warrenton st.....	Ellot st. to Tremont st.....	670	1,587	1884-91
Warrenton st.....	Shawmut ave. to Washington st....	468	910	1891
Water st.....	Congress st. to Kilby st.....	255	694	1889
Water st.....	Liberty sq. to Broad st....	252	682	1896
Wiggin st.....	N. Margin st. to Tileston st.	107	119	1887
Wiget st.....	Salem st. to N. Margin st.....	259	240	1897
West st.....	At Tremont st.....		64	1900
Winter st.....	At Tremont st.....		38	1900
		43,895	132,495	

Charlestown.

Austin st.....	Seminary pl. to Lawrence st.....	156	451	1891
Bunker Hill st.....	At Tufts st.		150	1897
Charlestown bridge	Over Fitchburg Railroad.....	60	533	1899
Corey st.	124 ft. north of Moulton st. to Moul- ton st.....	124	276	1897
Moulton st.....	Easterly side of Corey st. to Vine st.,	81	243	1897
Moulton st.....	Vine st. to Bunker Hill st.....	130	390	1897
Rutherford ave.....	Devon st., 128 ft. westerly	128	284	1897
Tufts st.....	Bunker Hill st., 141 ft. northerly....	141	415	1897
Vine st.....	Bunker Hill st., across Moulton st...	165	670	1897
		985	3,412	

List of Streets Paved with Trinidad Asphalt. — Concluded.**South Boston.**

Name.	Location.	Length.	Area.	Year Laid.
D st.....	W. Fifth st. to Gold st.....	126	448	1889
E st.....	W. Third st. to Bolton st.....	111	410	1892
Rogers st.	Dorchester st. to Preble st.	300	480	1891
W. Sixth st.	160 ft. east of C st., towards D st.....	91	305	1897
W. Third st.....	153 ft. west of E st., across E st.....	185	769	1892
		873	2,412	.....

Roxbury.

Cabot st.....	Tremont st. to Ruggles st.....	1,236	3,571	1891
Cabot st.....	Easterly side of Ruggles st. to Vernon st.....	723	2,988	1892
Cabot st.....	Easterly side of Vernon st. to Linden Park st.....	484	1,390	1897
Columbus ave.....	301 ft. south of Camden st., across Terry st.....	2,640	15,840	1896
Public alley 404.....	Between Huntington ave. and St. Botolph st., from 66 ft. south of Cumberland st. to Public alley 405,	534	533	1899
Public alley 405.....	94 ft. east of Huntington ave. to 62 ft. west of St. Botolph st., rear northeast side of Massachusetts ave.....	100	89	1899
Ipswich st.....	Bridge over waterway.....		300	1898
		5,717	24,711	.....

List of Streets Paved with Sicilian Rock Asphalt, Feb. 1, 1901.
City Proper.

NAME.	Limits.	Length.	Area.	Year Laid.
Acton st.....	Washington st. to Bradford st.....	259	352	1896
Albany st.....	Easterly side of Stoughton st. across E. Concord st.	285	1,710	1897
Ash st.....	Oak st. across Nassau st.....	220	391	1895
Avery st.....	Washington st. to Mason st.....	360	275	1897
Beacon st.	Arlington st. to Clarendon st.	1,241	6,681	1900
Barton st.	Leverett st. to Milton st.....	427	723	1895
Bradford st.....	Waltham st. to Shawmut ave.....	600	1,270	1897
Boylston st.	Eastside Arlington st. to Berkeley st.	681	3,827	1900
Cobb st.	Washington st. to Shawmut ave....	347	1,041	1897
Decatur st.	Washington st. to Harrison ave....	370	781	1892
Dwight st.....	Shawmut ave. to Tremont st.....	716	2,075	1893
Exeter pl.	Chauncey st. to Harrison ave.....	170	387	1897
Fabln st.	Newland st. to Ivanhoe st.	421	615	1895
Fay st.....	Dover st. to Harrison ave.	318	560	1894
Hanover st.	Tileston st. across Charter st.....	315	934	1896
Hamburg st.....	Mystic st. to Harrison ave.	383	597	1896
Huntington ave....	B. & A. R.R. to Cumberland st.....	1,591	8,840	1896
Kingston st....	Beach st. to Essex st.....	492	1,859	1899
Mason st.....	From a point 213 ft. south of West st. to 444 ft. south of West st.....	231	470	1894
Massachusetts ave..	Washington st. to Harrison ave. (southerly roadway)	344	2,030	1894
Massachusetts ave..	Harrison ave. to Albany st. (south- erly roadway).....	318	2,121	1894
Mayo st.....	Castle st. to Cobb st.....	251	418	1897
Meander st.	East Dedham st. to Malden st.....	307	437	1896
Motte st.....	Washington st. to Harrison ave....	332	516	1892-99
Mystic st.....	Malden st. to East Dedham st.....	204	228	1896
Mystic st.....	East Dedham st. to East Canton st..	215	335	1896
Mystic st.....	East Canton st. to East Brookline st.	216	337	1896
No. Margin st.....	Thacher st. towards Endicott st....	205	518	1897
Norwich st.....	Mystic st. to Meander st.	221	339	1896
Ohio st.....	Washington st. to Shawmut ave....	343	277	1896
Pemberton sq.....	Front of Suffolk County Court-house,	323	1,365	1894
Prince st.....	Hanover st. to Bennet ave.....	293	654	1895
Prince st.....	Salem st., 220 ft. towards Hanover st.	213	487	1900
Shawmut ave.....	132 ft. south of Castle st. across Cherry st....	327	945	1898
<i>Carried forward,</i>	.....	13,539	44,393	

List of Streets Paved with Sicilian Rock Asphalt.—Continued.
City Proper.

NAME.	Limits.	Length.	Area.	Year Laid.
<i>Brought forward,</i>		13,589	44,898	
Taylor st.....	Dwight st. to Milford st.....	196	274	1896
Whitmore st.....	Kneeland st. to Harvard st.	249	445	1896
		13,984	45,112	
East Boston.				
Meridian st.....	Trenton st. to Eutaw st.....	235	600	1900
Charlestown.				
Warren st.....	Winthrop st. to Soley st.	127	265	1896
South Boston.				
Athens st.	West Second st. to A st.	617	916	1896
Athens st.	B st. to C st.....	515	746	1892
E. Broadway.....	Front of Lincoln School	180	1,000	1897
K st.....	East Sixth st. to East Eighth.	566	1,063	1896
W. Broadway.....	From 196 ft. east of easterly line of Dorchester ave. to A st.	360	1,440	1892
W. Broadway.....	Gardner pl. to 150 ft. easterly	150	648	1898
W. Broadway.....	New England Bridge to E st. (4-ft. gutters)		1,487	1897
W. Broadway.....	150 ft. west of F st. to 267 ft. east of F st.....	448	1,544	1897
W. Broadway.....	267 ft. east of F st. to 44 ft. west of Dorchester st.....	410	1,818	1896
		3,246	10,682	
Roxbury.				
Columbus ave.	Terry st. to within 61 ft. north of Station st.....	884	5,304	1896
Huntington ave.....	Easterly side of Cumberland st. to Massachusetts ave.	747	4,150	1896
Huntington ave....	Massachusetts ave. to Gainsborough st.	587	3,372	1896
		2,218	12,826	
Brighton.				
Cottage Farm bridge.....	Over Boston & Albany Railroad....	140	1,556	1896

List of Streets Paved with Seyssel Rock Asphalt, Feb. 1, 1901.
City Proper.

NAME.	Limits.	Length.	Area.	Year Laid.
Genesee st.....	Harrison ave. to Albany st.....	505	1,122	1899
Mason st.....	444 ft. south of West st. to Avery st.,	123	265	1899
Milton st.....	Brighton st. to Spring st.....	308	274	1899
Oswego st.....	Harrison ave. to Albany st.....	506	1,068	1899
Paul st.....	Emerald st. to Village st.....	133	236	1897
Pelham st.....	Washington st. to Shawmut ave.....	320	693	1897
Public alley 102.....	23 ft. south of Marshall st. to Creek sq.	182	184	1899
Public alley 702.....	Worcester st. to W. Springfield st...	222	222	1899
Public alley 703.....	Between Newland st. and Public alley 702.....	116	103	1899
Waterford st.....	Washington st. to Shawmut ave.....	316	544	1897
Paul st.....	Village st. to Tremont st.....	276	456	1897-99
		3,007	5,167	

Other Asphalt Streets.

NAME.	Location.	Length.	Area.	Year Laid.
Harris st.....	Hanover st. to North st. (coal tar, Ayer's)	294	425	
Massachusetts ave..	Columbus ave. to Tremont st., northerly roadway (asphaltina).....	267	1,622	1897
Public alley 422.....	Between Commonwealth ave. and Marlborough st., from Arlington st. 70 ft. westerly (tar concrete)....	70	62	
Public alley 436.....	Between Commonwealth ave. and Newbury st., from Berkeley st. to Clarendon st. (tar concrete).....	580	516	
I st., South Boston..	East Broadway to East Fourth st. (coal tar, Ayer's)	272	1,027	
		1,483	3,672	

Summary.

Trinidad asphalt	51,210 feet, or	9.70 miles, or	162,452 sq. yds.	
Sicilian rock asphalt.....	19,950 "	3.77 "	71,141 "	
Seyssel rock asphalt.....	3,007 "	0.57 "	5,167 "	
Other asphalts.....	1,743 "	0.33 "	4,230 "	
Total sheet asphalts.....	75,910 "	14.37 "	242,990 "	
Asphalt blocks.....	2,124 "	0.40 "	4,173 "	
Total.....	78,034 "	14.77 "	247,163 "	

A List of Streets Paved with Sheet Asphalt and having a Maintenance Guarantee, February 1, 1901.
Trinidad Asphalt.
City Proper.

NAME.	Limits.	Base.	Length, feet.	Length, miles.	Area.	Guarantee expires.
Albany st.....	80 feet north of Broadway across Way st.....	Concrete.....	105	.020	397	Aug. 17, 1904
Andrews st.....	East Dedham to East Canton st.....	Concrete.....	216	.041	312	Oct. 22, 1909
Batterymarch st.	Milk st. to Liberty sq.....	Concrete.....	150	.028	498	Sept. 28, 1901
Beacon st.....	150 feet from west curb line of Gloucester st. to 68 feet beyond west line of Gloucester st.....	Concrete.....	218	.041	1,183	June 16, 1903
Boylston st....	Easterly side Berkeley st. across Clarendon st.....	Concrete.....	666	.124	3,869	Oct. 4, 1902
Broadway.....	Albany st. to 105 feet west of Albany st.....	Concrete.....	105	.020	467	Nov. 11, 1904
Castle st.....	Castle sq. easterly.....	Concrete.....	.....	.....	427	Aug. 27, 1904
Cazenove st....	For 45 feet from Columbus ave.....	Concrete.....	45	.009	100	July 15, 1904
Charles st.	Easterly side of Fruit st. across Allen st.....	Cobble and Concrete...	706	.134	1,804	Oct. 31, 1909
Columbus ave..	Boston & Albany R.R. bridge to Chandler st.....	Cobble and Concrete...	180	.034	740	July 15, 1904
Columbus ave..	Massachusetts ave. to 304 feet south of Camden st.....	Cobble and Concrete...	903	.171	5,418	Nov. 7, 1901
Cooper st.....	Endicott st. to Charlestown st.....	Cobble and Concrete...	205	.039	604	Sept. 27, 1902
Corning st....	Washington st. to Shawmut ave.....	Cobble and Concrete...	338	.064	734	May 25, 1901
Dartmouth st...	Buckingham st. to Boston & Albany R.R. bridge.....	Cobble and Concrete...	127	.024	580	May 16, 1904
Devonshire st..	Milk st. to Water st.....	Cobble and Concrete...	262	.050	736	Oct. 1, 1909
Endicott st....	Cooper st. across Thacher st.....	Cobble and Concrete...	318	.060	1,078	Oct. 26, 1909

A List of Streets Paved with Sheet Asphalt, etc. — Continued.

NAME.	Limits.	Base.	Length, feet.	Length, miles.	Area.	Guarantee expires.
Ferdinand st....	At Castle sq.....	Cobble and Concrete...	37	.007	107	June 1, 1904
Harrison ave....	22 feet south of Kneeland st. to 22 feet north of Harvard st.	Cobble and Concrete...	249	.047	885	Nov. 16, 1909
Hayward pl....	Washington st. to Harrison ave.	Concrete	260	.049	578	Nov. 7, 1903
Kilby st.....	State st. to Milk st., including Liberty sq.....	Cobble and Concrete...	640	.121	4,059	Sept. 28, 1903
Laconia st.....	Washington st. to Harrison ave.....	Concrete	330	.063	727	June 18, 1901
LaGrange st....	Tremont st. toward Washington st.....	Concrete	181	.034	355	Oct. 23, 1902
Lincoln pl.....	Worcester st. to West Springfield st.....	Concrete	217	.041	313	Aug. 17, 1902
Mason st.....	Tremont st. 85 feet easterly	Concrete	85	.016	164	Nov. 10, 1910
Parkman st....	North Anderson st. across Blossom st.....	Concrete	241	.046	550	Oct. 14, 1903
Pine st.....	Washington st. to Harrison ave.....	Concrete	419	.079	597	June 18, 1901
Public alley 401.	Between Huntington ave. and St. Botolph st., from Irvington st. to Garrison st.....	Concrete	350	.066	362	Oct. 2, 1909
Public alley 402.	Between Huntington ave. and St. Botolph st., from Garrison st. to West Newton st.....	Concrete	358	.068	374	Sept. 30, 1909
Public alley 403.	Between Huntington ave. and St. Botolph st., from West New- ton st. to Cumberland st.....	Concrete	355	.067	370	Sept. 29, 1909
Public alley 419.	Between Beacon st. and Marlborough st., from Clarendon st. to Dartmouth st.....	Concrete	575	.109	511	Sept. 28, 1909
Public alley 431.	Between Commonwealth ave. and Newbury st., from Hereford st. to 85 feet west of Gloucester st.....	Concrete	312	.059	277	Sept. 25, 1909
Public alley 437.	Between Commonwealth ave. and Newbury st., from Berkeley st. to Arlington st.....	Concrete	631	.120	561	Dec. 10, 1908
Public alley 701.	Between Union Park and Upton st., from 130 feet east of Tremont st. to Shawmut ave.....	Concrete	521	.099	611	Nov. 8, 1909
Stevens st.	Lincoln pl. towards Shawmut ave.....	Concrete	16	.003	23	Aug. 17, 1902
Temple pl.....	Tremont st. to Washington st.....	Concrete	503	.095	1,495	Oct. 1, 1910

Tremont st.	At Castle sq.	Concrete	60	.011	771	Aug. 27, 1904
Tremont st.	Boylston st. to Scollay sq.	Concrete	2,777	.535	10,552	Dec. 2, 1910
Trinity pl.	St. James st. across Stuart st.	Concrete	288	.075	1,150	Sept. 18, 1909
Trinity pl.	Stuart st. across Stanhope st.	Concrete	292	.049	757	Dec. 1, 1910
Unity st.	Charter st. to Tileston st.	Concrete	390	.062	500	Oct. 6, 1902
Water st.	Liberty sq. to Broad st.	Concrete	222	.048	632	Oct. 10, 1901
Wiget st.	Salem st. to North Margin st.	Concrete	269	.069	240	Sept. 25, 1902
Totals. ....	.....	.....	15,153	2.303	46,545	

Charlestown.

Bunker Hill st.	At Tufts st.	Concrete .....	.....	.....	150	Nov. 2, 1902
Corey st.	124 ft. north of Moulton st. to Moulton st.	Concrete	124	.024	276	Nov. 2, 1902
Moulton st.	Easterly side of Corey st. to Vine st.	Concrete	81	.015	243	Nov. 2, 1902
Moulton st.	Vine st. to Bunker Hill st.	Concrete	130	.025	390	Nov. 2, 1902
Rutherford ave.	Devon st., 123 ft. westerly.	Concrete	123	.024	284	Nov. 5, 1902
Tufts st.	Bunker Hill st. 141 ft. northerly.	Concrete	141	.027	415	Nov. 2, 1902
Vine st.	Bunker Hill st. across Moulton st.	Concrete	165	.061	670	Nov. 2, 1902
Totals. ....	.....	.....	769	.146	2,428	

A List of Streets Paved with Sheet Asphalt, etc. — Continued.
Roxbury.

NAME.	Limits.	Base.	Length, feet.	Length, miles.	Area.	Guarantee expires.
Cabot st.....	East side Vernon st. to Linden Park st.....	Concrete.....	484	.091	1,390	Aug. 30, 1902
Columbus ave...	301 ft. south of Camden st. across Terry st.....	Concrete.....	2,640	.500	15,840	Nov. 7, 1901
Public alley 404..	Between Huntington ave. and St. Botolph st., from 66 ft. south of Cumberland st. to Public alley 405.....	Concrete.....	534	.101	533	Oct. 5, 1909
Public alley 405..	Rear north-east side of Massachusetts ave., from 94 ft. east of Huntington ave. to 62 ft. west of St. Botolph St.....	Concrete.....	100	.019	89	Oct. 5, 1909
Totals.....	.....	.....	3,758	.711	17,852	

Sicilian Rock Asphalt.
City Proper.

NAME.	Limits.	Base.	Length, feet.	Length, miles.	Area.	Guarantee expires.
Acton st.....	Washington st. to Bradford st.	Concrete.....	259	.049	352	Nov. 1, 1901
Albany st.	Easterly side Stoughton st. across East Concord st.	Concrete.....	285	.054	1,710	Nov. 8, 1902
Avery st.....	Washington st. to Mason st.....	Concrete.....	360	.068	275	Oct. 18, 1902
Beacon st.....	Arlington st. to Clarendon st.....	Concrete.....	1,245	.235	6,681	Unfinished.
Boylston st.....	Arlington st. to Berkeley st.	Concrete.....	681	.129	3,844	Nov. 28, 1910

STREET DEPARTMENT.

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Bradford.....	Waltham st. to Shawmut ave.	Concrete.....	600	.114	1,470	Sept. 11, 1902
Cobb st.	Washington st. to Shawmut ave.	Concrete.....	347	.066	1,041	Sept. 16, 1902
Exeter pl.	Chauncy st. to Harrison ave.	Concrete.....	170	.032	387	Oct. 20, 1902
Hanover st.	Mystic st. to Harrison ave.	Concrete.....	383	.072	597	Oct. 1, 1901
Hanover st.	Tilston st. across Charter st.	Concrete.....	315	.060	384	May 14, 1901
Huntington ave.,	B. & A. R.R. bridge to Cumberland st.	Concrete.....	1,591	.301	8,940	Oct. 12, 1901
Kington st.	Beach st. to Essex st.	Concrete.....	492	.088	1,869	Aug. 9, 1909
Mayo st.	Castle st. to Cobb st.	Concrete.....	251	.047	418	Sept. 11, 1902
Meander st.	East Dedham st. to Malden st.	Concrete.....	307	.058	437	Sept. 8, 1901
Mystic st.	Malden st. to East Dedham st.	Concrete.....	204	.039	226	Oct. 20, 1901
Mystic st.	East Dedham st. to East Canton st.	Concrete.....	215	.041	335	Oct. 20, 1901
Mystic st.	East Canton st. to East Brookline st.	Concrete.....	216	.041	337	Oct. 20, 1901
North Margin st.	Thacher st. toward Endicott st.	Concrete.....	205	.039	518	Nov. 19, 1902
Norwich st.	Mystic st. to Meander st.	Concrete.....	221	.042	339	Sept. 24, 1901
Ohio st.	Washington st. to Shawmut ave.	Concrete.....	343	.065	277	July 30, 1901
Prince st.	Salem st. toward Hanover st.	Concrete.....	213	.040	464	Dec. 7, 1910
Shawmut ave.	132 feet south of Castle st. across Cherry st.	Concrete.....	327	.062	945	Sept. 19, 1903
Taylor st.	Dwight st. to Milford st.	Concrete.....	196	.037	274	May 29, 1901
Totals.....	.....	.....	9,426	1.784	32,390	

East Boston.

Meridian.....	Trenton st. to Eutaw st.	Concrete.....	225	.044	540	Dec. 8, 1910
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A List of Streets Paved with Sheet Asphalt, etc.—Continued.
South Boston.

NAME.	Limits.	Base.	Length, feet.	Length, miles.	Area.	Guarantee expires.
East Broadway.	Front of Lincoln school.....	Concrete.....	180	.084	1,000	Oct. 7, 1902
K st.....	East Sixth st. to East Eighth st.....	Concrete.....	566	.107	1,083	May 20, 1901
West Broadway,	N. Y., N. H. & H. R. R., Midland Div., bridge to E. st. (4 ft. gutters),	Concrete.....	.....	.....	1,487	Oct. 5, 1902
West Broadway,	150 ft. west of F st. to 267 ft. east of F st.	Concrete.....	448	.085	1,544	Oct. 28, 1902
West Broadway,	267 ft. east of F st. to 44 ft. west of Dorchester st.	Concrete.....	410	.078	1,818	Dec. 15, 1903
Totals.....	.....	.....	1,604	.304	6,932	

Roxbury.

Columbus ave. ...	Terry st. to 61 ft. north of Station st.....	Concrete.....	884	.168	5,304	Oct. 23, 1901
Ipswich st.	Bridge over the waterway.....	.....	61	.011	267	Aug. 1903
Huntington ave.,	Easterly side of Cumberland st. to Massachusetts ave.	Concrete.....	747	.141	4,150	Oct. 12, 1901
Huntington ave.,	Massachusetts ave. to Gainsborough st.	Concrete.....	587	.111	3,372	Oct. 12, 1901
Totals.....	.....	.....	2,218	.420	13,196	

Brighton.

Cottage Farm...	Bridge over B. & A. R.R., northerly roadway.....	Concrete.....	140	.027	778	June 25, 1901
Cottage Farm...	Southerly roadway.....	Concrete.....				
Totals.....			140	.027	1,566	Oct. 29, 1901

Seyssel Asphalt.

NAME.	Limits.	Base.	Length, feet.	Length, miles.	Area.	Guarantee expires.
Genesee st.....	Harrison ave. to Albany st.	Concrete	505	.096	1,122	July 12, 1904
Mason st.	444 feet south of West st. to Avery st.	Concrete	123	.023	265	Nov. 23, 1904
Milton st.	Brighton st. to Spring st.	Concrete	308	.058	274	Sept. 8, 1909
Oswego st.	Harrison ave. to Albany st.	Concrete	506	.096	1,068	July 22, 1904
Paul st.	Emerald st. to Village st.	Concrete	193	.035	236	Oct. 23, 1902
Paul st.	Village st. to Tremont st.	Concrete	276	.052	456	Oct. 23, 1902
Pelham st.	Washington st. to Shawmut ave.	Concrete	320	.061	693	Oct. 12, 1902
Public alley 102,	23 feet south of Marshall st. to Creek sq.	Concrete	182	.034	184	Nov. 11, 1909
Public alley 702,	Worcester st. to West Springfield st.	Concrete	222	.043	222	Nov. 9, 1909
Public alley 703,	Between Newland st. and Public alley 702.	Concrete	116	.022	103	Nov. 9, 1909
Waterford st....	Washington st. to Shawmut ave.	Concrete	316	.060	544	Nov. 13, 1902
Totals.....			3,007	.569	5,167	

A List of Streets Paved with Sheet Asphalt, etc. — Concluded.
Asphaltina.

NAME.	Limits.	Base.	Length, feet.	Length, miles.	Area.	Guarantee expires.
Massachusetts ave	Columbus ave. to Tremont st., northerly roadway	Concrete	267	.051	1,622	Oct. 11, 1902
Summary.						
Trinidad asphalt.....		19,679 feet or 3.725 miles or 60,935 square yards.				
Sicilian rock asphalt.....		13,623 "	2,579 "	54,514 "		
Seyssel rock asphalt.....		3,007 "	0.569 "	5,187 "		
Asphaltina.....		267 "	0.051 "	1,622 "		
		*36,576 "	6.924 "	128,128 "		

* Total sheet asphalt under maintenance guarantee, February 1, 1901.

Cost of Asphalt Patching, 1900.

Work done by the Barber Asphalt Paving Company.

Trinidad Asphalt.

STREET LIMITS.	Year Laid.	Base.	Length, Miles.	Total Square Yards in Street.	Square Yards Resurfaced.	Cost of Patching.	Cost per Square Yard for Maintenance.
Court square, westerly side.....	1881	Concrete ..	.064	950	7.86	\$19 65	\$0.021
Doane st., Kilby to Broad st.....	1881	Concrete ..	.059	624	*11.62	24 77	.040
Liberty sq., that part east of Kilby st.....	1881	Concrete ..	.....	505	1.19	2 97	.006
Congress sq., intersection.....	1883	.....	Resurfaced	.....	.....	.....	.....
North Bennet st., Hanover to Salem st.....	1883	Cobble.....	.105	920	51.36	128 40	.140
Albany st., East Concord towards Massachusetts ave.....	1884	Concrete ..	.085	2,700	*142.43	315 09	.117
Ash st., Bennet to Nassau st.....	1887	Concrete ..	.044	427	4.84	12 13	.028
Bennet st., between Washington st. and Harrison ave.....	1887	Concrete ..	.034	350	6.04	15 10	.043
Central st., Kilby to Broad st.....	1887	Concrete ..	.059	869	0.98	2 45	.003
Cooper st., North Margin across Endicott st.....	1887	Concrete ..	.037	597	15.32	38 30	.064
Exchange pl., Congress to Kilby st.....	1887	Concrete ..	.046	678	7.08	17 70	.026
Poplar st., Spring to Charles st.....	1887	Cobble.....	.109	1,192	48.31	120 78	.101
Tileston st., 155 feet west of Hanover across Unity st.....	1887	Cobble.....	.048	346	18.71	46 77	.135
Wiggin st., Tileston to North Bennet st.....	1887	Cobble.....	.020	119	8.51	21 38	.179
West Sixth st., between C and D sts.....	1887	Concrete ..	.017	305	2.37	5 32	.019
Brattle sq., Brattle to Elm st.....	1888	Concrete ..	.053	670	21.95	54 87	.082

Cost of Patching, Trinidad Asphalt, 1900.—Continued.

STREET LIMITS.	Year Laid.	Base.	Length, Miles.	Total Square Yards In Street.	Square Yards Resurfaced.	Cost of Patching.	Cost per Square Yard for Maintenance.
D st., Fifth to Gold st.....	1889	Concrete ..	.024	448	2.95	7 38	.016
Water st., Congress to Kilby st.....	1889	Concrete ..	.048	694	120.02	300 05	.432
Austin st., Seminary pl. to Lawrence st.....	1891	Concrete ..	.030	451			
Beacon st., Charles across Arlington st.....	1891	Concrete ..	.165	3,800	131.08	327 70	.086
Cabot st., Tremont to Ruggles st.....	1891	Concrete ..	.234	3,571	66.34	165 85	.046
Court st., Washington to Court sq.....	1891	Concrete ..	.044	642	31.02	77 55	.121
Hollis st., Tremont toward Washington st.....	1891	Block ..	.032	521	6.39	15 98	.031
Hudson st., Beach to 90 feet North of Curve st.....	1891	Concrete ..	.266	3,038	243.58	608 95	.155
Moon st., North sq. to Lewis st.....	1891	Cobble.....	.034	384	5.29	13 22	.034
Rogers st., Dorchester to Preble st.....	1891	Cobble.....	.068	480			
Sun Court st., Moon to North st.....	1891	Cobble.....	.029	218	1.75	4 37	.020
Warrenton st.....	1891	Cobble.....	.216	2,497	28.42	71 05	.030
Beacon st., Dartmouth to within 150 feet of Gloucester st.....	1892	Concrete ..	.330	9,277	471.77	1,179 43	.127
Brighton st., Leverett to Allen st.....	1892	Cobble.....	.160	1,737	160.23	400 58	.230
Cherry st., Washington st. to Shawmut ave	1892	Concrete ..	.063	594			
Clark st., Hanover to North st.....	1892	Cobble..	.060	614	17.31	43 27	.070
Davis st., Washington st. to Harrison ave.....	1892	Concrete ..	.061	646	3.85	9 62	.015
Groton st., Washington st. to Shawmut ave.....	1892	.....	.063	558	7.07	17 68	.032
Hanover ave., Hanover st. to North st.....	1892	Cobble.....	.058	266	6.33	15 83	.060

STREET DEPARTMENT.

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Malcolm st., Mt. Vernon to Chestnut st.....	1892049	290					
Massachusetts ave., Columbus ave. to Washington st., southerly roadway.....	1892	Concrete ..	.174	5,549	108.74		251 85	.046	
Poplar st., Chambers across Spring st.....	1892	Cobble.....	.115	1,250	46.20		116 50	.092	
Stillman st., Endicott across North Margin st.....	1892	Cobble.....	.082	453	6.98		17 32	.088	
Stoddard st., Howard to Court st.....	1892	Cobble.....	.096	150	24.50		61 25	.406	
Thacher st., Charlestown to Endicott st.....	1892	Concrete ..	.088	563	2.41		6 02	.011	
Cabot st., easterly side Ruggles to Vernon st.....	1892	Concrete ..	.137	2,988	12.94		24 85	.013	
E st., West Third to Bolton st.....	1892	Concrete ..	.021	410					
West Third st., west of E st., across E st.....	1892	Concrete ..	.035	769					
Columbus ave., B. & A. R.R. to Massachusetts ave.....	.....	Concrete ..	.663	15,000	* 1,055.53		2,632 53	.176	
Harrison ave., between E. Newton st. and Massachusetts ave.....	.....	Concrete ..	.144	905	36.02		90 05	0.090	
Arch st., Franklin to Milk st.....	1848	Concrete ..	.061	1,267	37.86		94 65	.075	
Beacon st., 68 feet south of Gloucester st. to Massachusetts ave.....	1893	Concrete ..	.136	5,391	251.06		637 65	.116	
Parmenter st., Hanover to Salem st.....	1893	Concrete ..	.063	764	*65.63		140 58	.184	
Barton ct., Barton to Brighton st.....	1894	Cobble.....	.025	186	16.53		41 33	.222	
Chambers st., Green across Poplar st.....	1894	Cobble.....	.067	1,061	73.43		188 58	.173	
Charter st., Hanover across Unity st.....	1894	Cobble.....	.060	686					
Court sq., easterly side.....	1894	Concrete ..	.062	933	12.26		30 65	.061	
Dartmouth st., Boylston to Newbury st.....	1894	Concrete ..	.060	2,066	32.25		80 62	.069	
Oxford st.....	1895	Macadam..	.061	735					
			4.911	84,065	3,427.27		\$8,468 11		

* Part surface heater work.
 Prices paid, \$2.50 per square yard for entire removal.
 Prices paid, \$2.00 per square yard for surfacing patches.
 Average cost per square yard, \$0.101.

Cost of Patching, 1900. — Concluded.
Work done by Boston Asphalt Company.
Sicilian Rock Asphalt.

STREET LIMITS.	Year Laid.	Base.	Length, Miles.	Total Square Yards in Street.	Square Yards Resurfaced.	Cost of Patching.	Cost per Square Yard for Maintenance.
Athens st., B to C st.....	1892	Concrete ...	.008	746			
Broadway, between Dorchester ave. and A st	1892	Concrete ...	.008	1,440	122.96	\$307 40	\$0.213
Decatur st., Washington st. to Harrison ave.....	1892	Concrete ...	.070	781	25.09	62 73	.080
Motte st., Washington st. to Harrison ave.....	1892	Concrete ...	.063	516			
Dwight st., Shawmut ave. to Tremont st.....	1893	Concrete ...	.136	2,075	12.80	32 00	.015
Broadway, Gardiner pl. to 150 ft. east.....	1893	Concrete ...	.028	648	15.61	39 02	.060
Ash st., Oak across Nassau st.....	1894	Cobble.....	.042	391	17.95	44 88	.115
Charles st., in front of Old Eye and Ear Infirmary.....	1894	Paved with Granite Blocks.					
Fay st., Harrison ave. to Dover st.....	1894	Cobble.....	.060	560			
Mason st., 213 ft. south of West st. to 444 ft. south of West st.,	1894	Block.....	.044	470	35.84	89 60	.191
Massachusetts ave., Washington to Albany, southerly roadway.....	1894	Concrete ...	.125	4,151	16.24	40 60	.010
Pemberton sq., in front Suffolk County Court House.	1894	Concrete ...	.061	1,365			
			.735	13,143	246.49	\$616 23	

Price paid, \$2.50 per square yard.

Average cost per square yard, \$0.047.

Measurements have also been made of asphalt patching, made necessary by settlement, resetting edgestones, resetting crosswalks, etc., which are not included in these tables.

Repairs made by Barber Asphalt Company.
Coal Tar Pavement.

STREET LIMITS.	Year Laid.	Base.	Length, Miles.	Total Square Yards in Street.	Square Yards Resurfaced.	Cost of Patching.	Cost per Square Yard for Maintenance.
Harris st., Hanover to North.....	Cobble.....	.066	426	8.67	\$21 67	\$0.061
I st., Broadway to E. Fourth.....	Cobble.....	.061	1,027	108.40	271 00	.264
			.107	1,452	117.07	\$292 67	

Price paid, \$2.50 per square yard.
Average cost per square yard, \$0.201.

Comparative Cost, for the Year 1900, of Patching Asphalt Pavements, having no Maintenance Guarantee.

Trinidad Asphalt.

PAVEMENT LAID.	Area square yards.	Cost.	Average Cost per sq. yard.
1881	2,079	\$47 39	\$0.023
1888	920	128 40	.140
1884	2,700	315 09	.117
1887	4,888	280 48	.057
* 1888	1,665	144 92	.087
1889	1,142	307 48	.269
† 1891	16,502	1,284 67	.078
1892	26,118	2,153 20	.082
1893	7,422	862 88	.116
‡ 1894	5,609	336 17	.060
	69,085	\$5,860 58	

* Not including Columbus avenue.

† Harrison avenue, part of which has been resurfaced, included in 1888.

‡ Including Oxford street, which was laid in 1895.

Sicilian Rock Asphalt.

PAVEMENT LAID.	Area square yards.	Cost.	Average Cost per sq. yard.
1892	3,488	\$370 13	\$0.106
1893	2,723	71 02	.026
1894	6,937	175 08	.025
	13,148	\$616 23	

Street Mileage.

The following table shows the length of public highways and character of the pavements, February 1, 1901.

DISTRICTS.	Asphalt.	Granite Block.	Wooden Block.	Brick.	Cobble.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1899 report.....	13.80	86.97	.....	0.80	1.01	280.57	95.98	10.42	489.55
February 1, 1901.									
City Proper.....	12.09	45.00	0.06	0.66	0.67	25.84	0.34	0.35	85.01
Charlestown.....	0.21	9.35	.....	.....	.....	13.49	.....	0.02	23.07
East Boston.....	0.05	4.78	.....	.....	0.13	8.39	14.28	0.14	27.77
South Boston.....	0.83	14.72	.....	.....	0.05	21.05	1.94	4.93	43.52
Roxbury.....	1.55	9.54	.....	0.14	0.02	67.86	7.42	1.99	88.92
West Roxbury.....	.....	0.20	.....	.....	.....	54.69	24.27	0.88	80.04
Dorchester.....	.....	4.24	.....	.....	.....	76.61	19.80	1.03	101.68
Brighton.....	0.03	.....	.....	.....	.....	24.20	17.88	0.13	42.24
Total.....	*14.76	†87.83	0.06	0.80	0.87	292.13	85.93	9.47	491.85

NOTE.—The above districts refer to areas enclosed by the original boundary lines.

* Of this amount 0.40 miles = asphalt blocks.

† Of this amount 8.24 miles = granite block paving on concrete base.

4.21 miles of public alleys, chap. 298, Acts of 1898, included in this table.

Total length of public streets, 491.85 miles.

There have been laid out and accepted by the Street Commissioners during the year 1.59 linear miles of public streets; corrections to previous measurements on account of revision and other causes show an increase of .71 miles, making a total net increase of 2.30 miles.

The rate of increase from year to year is shown in the following table:

1859.....111.50 miles.	1881.....355.50 miles.	1892.....434.59 miles.
1871.....201.32 "	1882.....359.85 "	1893.....443.34 "
1872.....207.40 "	1883.....367.99 "	1894.....447.65 "
1873.....209.24 "	1884.....374.10 "	1895.....452.12 "
1874.....313.90 "	1885.....379.60 "	1896.....456.11 "
1875.....318.58 "	1886.....383.55 "	1897.....459.12 "
1876.....327.50 "	1887.....390.30 "	1898.....471.19 "
1877.....333.20 "	1888.....392.72 "	1899.....479.47 "
1878.....340.39 "	1889.....397.84 "	1900.....489.55 "
1879.....345.19 "	1890.....404.60 "	1901.....491.85 "
1880.....350.54 "	1891.....409.60 "	

Areas of Pavement.

The following table shows the area of pavements in square yards, arranged by districts.

Districts.	Asphalt.	Granite Blocks.	Wooden Blocks.	Brick.	Cobble.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1899 report.....	225,811	1,912,176	.....	5,375	11,381	5,243,415	1,518,818	332,383	9,238,159
February 1, 1901.									
City Proper.....	189,394	978,316	1,236	4,713	6,074	483,095	2,508	8,618	1,076,013
Charlestown	3,777	215,274	.....	.....	.....	202,637	.....	3,969	424,977
East Boston	600	108,097	.....	.....	2,600	172,559	266,712	29,948	580,516
South Boston.....	14,121	334,978	.....	.....	1,192	371,435	38,601	122,908	885,235
Roxbury	37,686	208,179	.....	682	102	1,246,736	109,688	39,507	1,642,660
West Roxbury.....	.....	3,367	.....	.....	.....	927,694	867,823	24,311	1,813,086
Dorchester.....	.....	93,515	.....	.....	.....	1,392,816	313,373	54,049	1,863,733
Brighton	1,556	.....	.....	.....	.....	629,042	267,684	9,401	907,683
Total	*247,134	†1,941,726	1,236	5,375	9,968	5,427,924	1,856,389	292,011	9,381,633

NOTE.—The above districts refer to areas enclosed by the original boundary lines.

*Of this amount 4,173 square yards = asphalt blocks.

†Of this amount 198,970 square yards = granite block paving on concrete base.

21,142 square yards of public alleys, Chap. 298, Acts of 1898, included in this table.

INCOME.

Statement showing the amount of bills and cash deposited with City Collector, less bills withdrawn, for the year ending January 31, 1901, by the several divisions of the Street Department:

Bridge Division	\$519 17
Boston and Cambridge Bridges	392 35
Ferry Division	164,241 49
Paving Division	10,088 81
Sanitary Division	10,708 84
Sewer Division	80,812 92
Street-Cleaning Division	2,264 38
Street-Watering	186,583 94
	<hr/>
	<u>\$455,111 90</u>

Statement showing the amount paid into the City Treasury during the same period on account of the several Divisions of the Street Department:

Bridge Division	\$479 17
Boston and Cambridge Bridges	392 35
Ferry Division	164,091 49
Paving Division	8,817 14
Sanitary Division	7,426 07
Sewer Division	70,057 50
Street-Cleaning Division	1,522 75
Street-Watering	148,291 31
	<hr/>
	<u>\$401,077 78</u>

CENTRAL OFFICE DIVISION.

EXPENSES OF THE CENTRAL OFFICE.

For the current expenses of the Central Office the City Council appropriated the sum of twenty thousand (\$20,000) dollars, which was expended as follows:

Salaries	\$17,235 01
General office expenditures	2,759 65

Total	<u>\$19,994 66</u>
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leaving a balance of five dollars and thirty-four cents (\$5.34), which was transferred to the City Treasury.

Respectfully submitted,

B. T. WHEELER,
Superintendent of Streets.

PART II.

APPENDICES.

PAGES 1 TO 254.

APPENDIX A.

REPORT OF THE DEPUTY SUPERINTENDENT OF THE BRIDGE DIVISION.

927 AND 928 TREMONT BUILDING,
BOSTON, February 1, 1901.

Mr. B. T. WHEELER,

Superintendent of Streets :

DEAR SIR, — I respectfully submit my annual report of the expenditures, income, and operations of the Bridge Division of the Street Department for the financial year ending January 31, 1901.

Embodied in this report will be found a detailed statement of the expenditures, a description of the work done on each bridge, also a tabulated account of the bridges supported wholly or in part by the City of Boston, widths of bridges and of draw openings, widths of roadways and sidewalks, character of pavements, number of openings made for navigation, etc.

The total number of bridges in Boston is 155, not including culverts. Eight of these bridges, namely, Harvard, Canal, Prison Point, West Boston, Essex street, Cambridge street, Western avenue to Cambridge, and North Harvard street, all connecting Boston and Cambridge, are under the care of two commissioners, one of whom is appointed by the Mayor of the City of Boston, the other by the Mayor of the City of Cambridge.

One hundred and fifteen bridges are supported wholly or in part by the City of Boston, 28 of which are tide-water bridges, provided with a draw, and 40 are wholly supported by railroad corporations.

Of the tide-water bridges there are 13 of great importance, namely, Malden and Mt. Washington avenue, operated by hand-power; the new Charlestown bridge, Summer street, Meridian street, Chelsea [North], Federal street, Dover street, all operated by electricity; Warren, Broadway, Congress street, L street, and Chelsea [South], operated by steam-power.

Work necessitating new floor beams, new deck, and sheathing, has been performed on Allston, Blakemore street, Massachusetts avenue, Mattapan, and Swett-street bridges. New sidewalks on Massachusetts avenue, Mattapan, West Fourth street, Dover street, Federal street, Beacon street, Milton, Malden and Dartmouth-street bridges.

Ironwork has been scraped and painted on Allston, Blakemore street, Massachusetts avenue, Chelsea [North], Athens street, Gold street, Dartmouth street, Albany street, Brookline avenue, and Neponset bridges.

Bulkheads have been strengthened on Swett street, Linden Park street, and Williams-street bridges.

Piers have been rebuilt, new floor laid in boiler-room, fences repaired and painted, machinery repaired, sidewalks redecked and concreted on Warren bridge.

Draw has been widened, new piers, new wheel-guards, and new machinery, on Chelsea [North] bridge.

Two shelter-houses have been erected on Summer-street bridge.

Roadway has been repaved on Congress-street bridge.

Summer street extension is now open to travel to South Boston, the bridges having been completed.

Extensive repairs have been made on Winthrop bridge.

Piers have been rebuilt, and the foundation of the old draw removed from Dover-street bridge.

The bridge over Ipswich street, in the parkway, has been completed.

The new Malden bridge, between Charlestown and Everett, is being constructed, and will be completed before the close of the present year.

If the proposed new Broadway bridge, now under consideration, is not constructed early in the coming year a special appropriation must be made to put the bridge in good condition, and to rebuild the piers.

Congress street and Mt. Washington-avenue bridges should be rebuilt. I would recommend that early action be taken, especially on Congress street.

The machinery, piers, fender-guards, and water-ways of Meridian-street bridge, Chelsea [South] and Neponset bridges, are in need of extensive repairs.

Many of the bridges are old, and require much reconstruction, and as a large per cent. of the maintenance appropriation is required for the actual operation of the bridges, payment of draw-tenders, etc., I would recommend that where extensive repairs are needed, special appropriations should be made for that purpose.

The headquarters now occupied by this Division at South Boston have been acquired by the New York, New Haven & Hartford Railroad Company, and I would recommend that a building, to be used as a stable and storehouse, be erected on the lot owned by the City of Boston, on Broadway, near the corner of Dorchester avenue.

Particular attention has been given to the painting of the ironwork under the floor of the different bridges.

The force employed on the tide-water bridges has been so assigned that there is now on duty at all times either the draw-tender or his first assistant. The work performed by the men in charge of these bridges has been generally satisfactory; they have kept the piers and premises in good condition, and no accident has been reported that could have been attributed to their carelessness or negligence.

The inland bridges have all been carefully looked after, and thoroughly swept each week.

Care has been exercised in keeping on hand duplicate parts of gearing and machinery, and by so doing, due precautions have been taken against inconvenience to public travel and navigation.

Respectfully yours,

WALTER REED,

Deputy Superintendent.

OBJECT OF EXPENDITURES.

ADMINISTRATION.

Office expenses :

Printing and stationery . . .	\$704 35	
Sundry office expenses . . .	220 67	
		\$925 02
Salaries of Deputy Superintendent and clerical force		6,860 08
Salaries of Supervisor and Foreman		3,313 91
Board of Deputy Superintendent's horse and extra horse		613 69
Paid expert on real estate		250 00
Telephone at Deputy Superintendent's house		34 93
Amount expended, administration		<u>\$11,997 63</u>

MAINTENANCE EXPENDITURES.

Administration	\$11,997 63
On tide-water bridges	92,788 57
<i>Carried forward</i>	<u>\$104,786 20</u>

<i>Brought forward</i>	.	.	.	.	.	\$104,786	20
On inland bridges	.	.	.	.	.	20,143	14
North yard and stable	.	.	.	.	.	4,931	70
South yard and stable	.	.	.	.	.	8,719	52
Total	.	.	.	.	.	\$138,580	56

FINANCIAL STATEMENT.

MAINTENANCE APPROPRIATION.

Appropriation 1900-1	.	.	.	.	.	\$173,000	00
Received from Boston & Albany Railroad Company for work done in 1900	.	.	.	.	.	115	41
Received from New York, New Haven & Hartford Railroad Company for work done in 1899	.	.	.	.	.	90	04
Total	.	.	.	.	.	\$173,205	45
Amount of expenditures from February 1, 1900, to January 31, 1901	.	.	.	.	.	\$138,580	56
Transferred to Sanitary Division	.	.	.	.	.	4,238	30
Transferred to Street Cleaning Division	.	.	.	.	.	9,747	23
Unexpended balance (transferred to City Treasury January 31, 1901)	.	.	.	.	.	20,639	36
Total	.	.	.	.	.	\$173,205	45

SPECIAL APPROPRIATIONS IN CHARGE OF BRIDGE DIVISION.

NAME OF APPROPRIATION.	Appropriations and Balances.	Expended Feb. 1, 1900, to Jan. 31, 1901, and Transfers.	Balances on hand Jan. 31, 1901.
Congress-street bridge, reconstruction,	\$3,699 25	\$3,699 25	
Dover-street bridge, tearing out old work	2,000 00	84 00	\$1,916 00
Harvard-street bridge, reconstruction..	2,045 76	2,045 76	
Warren bridge, redecking old piers....	4,000 00	4,000 00	
Winthrop bridge.....	1,000 00	60 00	940 00
Totals..	\$12,745 01	\$9,889 01	\$2,856 00

Amount of expenditures February 1, 1900 to January 31, 1901	.	.	.	.	.	\$9,889	01
Balances unexpended	.	.	.	.	.	2,856	00
Amount of appropriations	.	.	.	.	.	\$12,745	01

STREET DEPARTMENT — BRIDGE DIVISION.

7

AMOUNTS CHARGED TO SPECIAL APPROPRIATIONS IN CHARGE
OF OTHER DIVISIONS.

Name of Appropriation.	Amount expended.
Chelsea bridge, widening opening, north draw	\$304 61
Reserve fund, settlement of claims	338 00
Total	<u>\$642 61</u>
Amount expended and charged to maintenance appropriation	\$138,580 56
Amount expended and charged to Bridge Division specials	9,889 01
Amount expended and charged to appropriations in charge of other Divisions	642 61
Grand total of expenditures February 1, 1900, to January 31, 1901	<u>\$149,112 18</u>

A detailed statement of expenditures and description of work performed follows; also a list of those bridges maintained wholly or in part by the City of Boston; statement of the public landing places; list of cable-houses and boxes; also buildings on bridges in charge of this Division; number of draw openings made for navigation; width of draw openings, and table showing widths of bridges and kind of roadway and sidewalks.

TIDE-WATER BRIDGES.

Broadway bridge (over Fort Point channel).

Patched deck, repaired sheathing under nine different orders, repaired engine, machinery, fence, pier, and sidewalk:

Labor	\$680 50
Material	891 14
	<u>\$1,571 64</u>

Regular expenses:

Salaries	\$5,422 29
Supplies	379 35
	<u>5,801 64</u>
	<u>\$7,373 28</u>

Charlestown bridge (from Boston to Charlestown).

Repaired sheathing in various places, electrical apparatus and concrete sidewalk, also reset buoys.

Labor	\$674 61
Material	950 10
	<u>\$1,624 71</u>

<i>Carried forward</i>	\$1,624 71	<u>\$7,373 28</u>
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<i>Brought forward</i>	.	.	.	\$1,624 71	\$7,373 28
Regular expenses :					
Salaries	.	.	.	\$7,077 60	
Supplies	.	.	.	219 99	
				<u>7,297 59</u>	8,922 30

Chelsea bridge [North] (over North channel,
Mystic river).

Patched sheathing, repaired foundation under
sprocket wheel, iron fence, and machinery, reset
buoy, and painted new draw :

Labor	.	.	.	\$725 86	
Material	.	.	.	748 02	
				<u>\$1,473 88</u>	
Regular expenses :					
Salaries	.	.	.	\$4,849 73	
Supplies	.	.	.	214 46	
				<u>5,064 19</u>	6,538 07

Chelsea bridge [South] (over South channel,
Mystic river).

Patched sheathing, repaired sidewalk, engine,
machinery and water-pipes, and painted draw-
house.

Labor	.	.	.	\$393 75	
Material	.	.	.	478 71	
				<u>\$872 46</u>	
Regular expenses :					
Salaries	.	.	.	\$4,667 48	
Supplies	.	.	.	289 57	
				<u>4,957 05</u>	5,829 51

Chelsea-street bridge (from East Boston to
Chelsea).

Sheathed draw, made general repairs, and painted
rail on draw.

Labor	.	.	.	\$69 25	
Material	.	.	.	153 07	
				<u>\$222 32</u>	
Regular expenses :					
Salary	.	.	.	\$299 00	
Supplies	.	.	.	25 60	
				<u>324 60</u>	546 92
<i>Carried forward</i>	.	.	.	.	\$29,210 08

STREET DEPARTMENT — BRIDGE DIVISION. 9

<i>Brought forward</i>			\$29,210 08
Commercial Point or Tenean bridge (Dorchester).			
Sheathed draw, patched sheathing, put on new flaps, and painted draw.			
Labor	.	.	\$93 75
Material	.	.	51 97
			<hr/> \$145 72
Regular expenses:			
Salary	.	.	50 00
			<hr/> 195 72
Congress-street bridge (over Fort Point channel).			
Sheathed the draw three times, patched the same various times, made general repairs, repaired machinery, engines, and built shelter houses and painted same.			
Labor	.	.	\$1,485 44
Material	.	.	1,711 22
			<hr/> \$3,196 66
Regular expenses:			
Salaries	.	.	\$5,452 98
Supplies	.	.	722 55
			<hr/> 6,175 53
			<hr/> 9,372 19
Dover-street bridge (over Fort Point channel).			
Sheathed the draw, patched same, new sidewalk on draw, put in oak headers, repaired machinery and electrical apparatus, reset buoy, and painted ironwork.			
Labor	.	.	\$912 36
Material	.	.	833 76
			<hr/> \$1,746 12
Regular expenses:			
Salaries	.	.	\$5,279 57
Supplies	.	.	58 03
			<hr/> 5,337 60
			<hr/> 7,083 72
Federal-street bridge (over Fort Point channel).			
Repaired water-way, sheathed draw twice, new sidewalk, repaired cap on pier, gear wheel, water-pipes and machinery, and reset buoy.			
Labor	.	.	\$362 74
Material	.	.	651 69
			<hr/> \$1,014 43
<i>Carried forward</i>	.	.	\$1,014 43
			<hr/> \$45,861 71

<i>Brought forward</i>	.	.	.	\$1,014 43	\$45,861 71
Regular expenses :					
Salaries	.	.	.	\$4,703 50	
Supplies	.	.	.	112 46	
				<u>4,815 96</u>	5,880 39
Granite bridge (from Dorchester to Milton).					
Repaired and painted fence.					
Labor	.	.	.	\$45 50	
Material	.	.	.	5 57	
				<u>\$51 07</u>	
Regular expenses :					
Salary	.	.	.	239 20	
				<u>290 27</u>	290 27
L-street bridge (over reserved channel at junction of Congress and L streets).					
Patched sheathing, sheathed the draw, put in oak headers, repaired fence, boat, engine and machinery, reset buoy, and painted draw-house.					
Labor	.	.	.	\$291 06	
Material	.	.	.	416 75	
				<u>\$707 81</u>	
Regular expenses :					
Salaries	.	.	.	\$4,203 86	
Supplies	.	.	.	406 68	
				<u>4,610 54</u>	5,818 35
Malden bridge (from Charlestown to Everett).					
Patched sheathing several times and built new sidewalk.					
Labor	.	.	.	\$390 12	
Material	.	.	.	58 04	
				<u>\$448 16</u>	
Regular expenses :					
Salaries	.	.	.	\$3,648 21	
Supplies	.	.	.	63 40	
				<u>3,711 61</u>	4,159 77
Meridian-street bridge (from East Boston to Chelsea).					
Patched deck and sheathing on draw and deck on pier, calked deck over motor, repaired electrical apparatus and machinery, and reset buoys.					
Labor	.	.	.	\$539 11	
Material	.	.	.	1,151 10	
				<u>\$1,690 21</u>	
<i>Carried forward</i>	.	.	.	\$1,690 21	\$61,460 49

STREET DEPARTMENT — BRIDGE DIVISION. 11

<i>Brought forward</i>	.	.	.	\$1,690 21	\$61,460 49
Regular expenses:					
Salaries	.	.	.	\$3,784 07	
Supplies	.	.	.	291 15	
				<u>4,075 22</u>	5,765 43
Mt. Washington-avenue bridge (over Fort Point channel).					
Patched deck and sheathing several times, repaired water-way, latch, wheel-guard, machinery, and built new chimney in draw-house.					
Labor	.	.	.	\$570 90	
Material	.	.	.	354 64	
				<u>\$925 54</u>	
Regular expenses:					
Salaries	.	.	.	\$3,758 17	
Supplies	.	.	.	168 69	
				<u>3,926 86</u>	4,852 40
Neponset bridge (from Dorchester to Quincy). Sheathed draw, put in new headers, repaired box-cover, boat, wheel-guard, and painted fence and iron girder on draw.					
Labor	.	.	.	\$259 00	
Material	.	.	.	224 04	
				<u>\$483 04</u>	
Regular expenses:					
Salary	.	.	.	\$398 84	
Supplies	.	.	.	1 19	
				<u>400 03</u>	883 07
North Beacon-street bridge (from Brighton to Watertown). Patched deck and sheathing three times.					
Labor	.	.	.	\$35 00	
Material	.	.	.	75 44	
				<u>\$110 44</u>	
Regular expenses:					
Salary	.	.	.	99 84	
				<u>210 28</u>	
Summer-street bridge (over Fort Point channel). Patched sheathing, repaired latch, track, cap on pier, machinery, iron fence, cable and chimney, and built two shelter houses.					
Labor	.	.	.	\$330 26	
Material	.	.	.	1,294 30	
				<u>\$1,624 56</u>	
<i>Carried forward</i>	.	.	.	\$1,624 56	\$73,171 67

<i>Brought forward</i>	.	.	.	\$1,624 56	\$73,171 67
Regular expenses :					
Salaries	.	.	.	\$4,534 85	
Supplies	.	.	.	651 19	
				<u>5,186 04</u>	6,810 60
Warren bridge (from Boston to Charlestown).					
Sheathed draw twice, patched sheathing, repaired stable, fence, float, sidewalk, engines, machinery, trucks and water-pipes, and painted fence.					
Labor	.	.	.	\$1,906 61	
Material	.	.	.	2,125 10	
				<u>\$4,031 71</u>	
Regular expenses :					
Salaries	.	.	.	\$5,299 57	
Supplies	.	.	.	740 16	
				<u>6,039 73</u>	10,071 44
Western-avenue bridge (from Brighton to Watertown).					
Patched sheathing and sidewalk, new bunter, repaired boat and latches.					
Labor	.	.	.	\$60 25	
Material	.	.	.	46 02	
				<u>\$106 27</u>	
Regular expenses :					
Salary	.	.	.	\$167 84	
Supplies	.	.	.	6 44	
				<u>174 28</u>	280 55
Winthrop bridge (from Breed's Island to Winthrop).					
Sheathed bridge, and repaired sidewalk and sheathing.					
Labor	.	.	.	\$138 50	
Material	.	.	.	371 84	
				<u>\$510 34</u>	
Regular expenses :					
Salary	.	.	.	\$150 00	
Supplies	.	.	.	2 50	
				<u>152 50</u>	662 84
Sundry Expenditures on tide-water bridges.					
Oak lumber for headers and other material	.	.	.	\$585 99	
<i>Carried forward</i>	.	.	.	\$585 99	\$90,997 10

STREET DEPARTMENT — BRIDGE DIVISION. 18

<i>Brought forward</i>	.	.	.	\$585 99	\$90,997 10
Regular expenses :					
Salary . . . . .	.	.	.	\$78 89	
Supplies . . . . .	.	.	.	585 59	
				<u>614 48</u>	1,200 47
Public Landings.					
East Boston :					
Regular expenses :					
Rent . . . . .	.	.	.	\$250 00	
Care . . . . .	.	.	.	25 00	
				<u>\$275 00</u>	
Jeffries Point :					
Labor . . . . .	.	.	.	\$16 00	
Regular expenses :					
Rent . . . . .	.	.	.	300 00	
				<u>316 00</u>	591 00
Total expended on tide-water bridges . . .					<u><u>\$92,788 57</u></u>

RECAPITULATION.

*Table showing Expenditures on the Tide-water Bridges,
February 1, 1900, to January 31, 1901.*

NAME OF BRIDGE.	Repairs, Labor, Lumber, Iron- work, and Painting.	Regular Ex- penses, Salaries, Fuel, and Supplies.	Total.
Broadway.....	\$1,571 64	\$5,801 64	\$7,373 28
Charlestown	1,624 71	7,297 59	8,922 30
Chelsea (North).....	1,478 88	5,064 19	6,543 07
Chelsea (South).....	872 46	4,957 05	5,829 51
Chelsea street.....	222 32	324 60	546 92
Commercial Point.....	145 72	50 00	195 72
Congress street.....	3,196 66	6,175 53	9,372 19
Dover street.....	1,746 12	5,337 60	7,083 72
Federal street.....	1,014 43	4,815 96	5,830 39
Granite.....	51 07	239 20	290 27
L street.....	707 81	4,610 54	5,318 35
Malden.....	448 16	3,711 61	4,159 77
Meridian street.....	1,690 21	4,075 22	5,765 43
Mt. Washington avenue	925 54	3,926 86	4,852 40
Neponset.....	483 04	400 03	883 07
North Beacon street.....	110 44	99 84	210 28
Summer street.....	1,624 56	5,186 04	6,810 60
Warren.....	4,081 71	6,039 73	10,071 44
Western avenue to Watertown..	106 27	174 28	280 55
Winthrop	510 34	152 50	662 84
Sundry expenditures.....	585 99	614 48	1,200 47
Public landings.....	16 00	575 00	591 00
Totals	\$23,159 08	\$69,629 49	\$92,788 57

INLAND BRIDGES.

Albany-street bridge (over Boston & Albany Railroad).

Sheathed twice, patched sheathing and sidewalk, and painted top and underside of bridge.

Labor	.	.	.	.	.	.	\$599 75	
Material	.	.	.	.	.	.	414 31	
								\$1,014 06

Allston bridge (over Boston & Albany Railroad at Cambridge street).

New deck and new sheathing laid, patched sheathing, and painted beams.

Labor	.	.	.	.	.	.	\$1,849 50	
Material	.	.	.	.	.	.	1,394 88	
								3,244 38

Ashland-street bridge (over New York, New Haven & Hartford Railroad, Providence Division).

Repaired and painted fence.

Labor	.	.	.	.	.	.	\$91 25	
Material	.	.	.	.	.	.	18 32	
								109 57

Ashmont bridge (over New York, New Haven & Hartford Railroad, Shawmut Branch, Plymouth Division).

Patched sheathing.

Labor	.	.	.	.	.	.	\$7 50	
Material	.	.	.	.	.	.	63	
								8 13

Athens-street bridge (over New York, New Haven & Hartford Railroad, Midland Division).

Patched sheathing and sidewalk.

Labor	.	.	.	.	.	.	\$39 00	
Material	.	.	.	.	.	.	3 25	
								42 25

Beacon-street bridge (over Boston & Albany Railroad).

Sheathed and patched sheathing.

Labor	.	.	.	.	.	.	\$73 50	
Material	.	.	.	.	.	.	292 56	
								366 06

Carried forward \$4,784 45

<i>Brought forward</i>		\$4,784 45	
Beacon-street bridge (over water-way).			
Sheathed and patched sidewalk.			
Labor	\$43 50		
Material	140 16		
			183 66
Beech-street culvert (at Central Station, West Roxbury).			
Patched deck and sheathing.			
Labor	\$21 75		
Material	1 81		
			23 56
Berkeley-street bridge (over Boston & Albany Railroad).			
Patched deck and sheathing three times, and painted ironwork on top.			
Labor	\$142 25		
Material	66 38		
			208 63
Berkeley-street bridge (over New York, New Haven & Hartford Railroad, Providence Division, old location).			
Patched deck and sheathing and repaired concrete walk.			
Labor	\$109 50		
Material	162 62		
			272 12
Blakemore-street bridge (over New York, New Haven & Hartford Railroad, Providence Division).			
New deck, sheathed entire, and painted iron beams and top.			
Labor	\$423 75		
Material	426 69		
			850 44
Boylston-street bridge (over Boston & Albany Railroad).			
Sheathed, new sidewalk, cleaned and painted iron beams.			
Labor	\$387 00		
Material	641 96		
			1,028 96
Broadway-bridge (over Boston & Albany Railroad).			
Put in deck, sheathed and repaired fence.			
Labor	\$122 25		
Material	10 19		
			132 44
<i>Carried forward</i>		\$7,484 26	

STREET DEPARTMENT — BRIDGE DIVISION. 17

<i>Brought forward</i>						\$7,484 26
Brookline-avenue bridge (over Boston & Albany Railroad).						
Repaired fence and painted ironwork.						
Labor	.	.	.	.	.	\$151 00
Material	.	.	.	.	.	116 41
						<hr/> 267 41
Byron-street bridge (over Boston, Revere Beach & Lynn Railroad).						
Sheathed the bridge.						
Labor	.	.	.	.	.	\$18 00
Material	.	.	.	.	.	92 04
						<hr/> 110 04
Columbus-avenue bridge (over Boston & Albany Railroad).						
Sheathed and painted ends of girders.						
Labor	.	.	.	.	.	\$41 25
Material	.	.	.	.	.	110 63
						<hr/> 151 88
Cornwall-street bridge (over Stony brook).						
New sidewalk.						
Labor	.	.	.	.	.	\$12 50
Material	.	.	.	.	.	60 14
						<hr/> 72 64
Cottage Farm bridge (over Boston & Albany Railroad at Commonwealth avenue).						
Painted iron fence.						
Labor	.	.	.	.	.	\$55 00
Material	.	.	.	.	.	7 00
						<hr/> 62 00
Cottage-street [foot] bridge (over flats East Boston).						
Bridge tender	.	.	.	.	.	\$728 00
Supplies	.	.	.	.	.	28 96
						<hr/> 756 96
Dartmouth-street bridge (over Boston & Albany Railroad).						
Put in new floor timbers, patched deck, sheathed, new sidewalk in part, cleaned and painted entire bridge.						
Labor	.	.	.	.	.	\$1,058 75
Material	.	.	.	.	.	650 68
						<hr/> 1,709 43
<i>Carried forward</i>	.	.	.	.	.	\$10,614 62

<i>Brought forward</i>		\$10,614 62
Dorchester-street bridge (over New York, New Haven & Hartford Railroad, Plymouth Division).		
Patched sheathing.		
Labor	\$2 50	
Material	61 78	
	<hr/>	64 28
Everett-street bridge (over Boston & Albany Railroad, Brighton).		
Patched sheathing twice.		
Labor	\$45 50	
Material	136 28	
	<hr/>	181 78
Ferdinand-street bridge (over Boston & Albany Railroad).		
Patched sheathing, repaired sidewalk and fence, painted fence and sheathed.		
Labor	\$71 00	
Material	8 96	
	<hr/>	79 96
Florence-street bridge (over Stony brook).		
Repaired sheathing.		
Labor	\$15 25	
Material	60 04	
	<hr/>	75 29
Gold-street bridge (over New York, New Haven & Hartford Railroad, Midland Division).		
Sheathed the bridge.		
Labor	\$114 00	
Material	29 71	
	<hr/>	143 71
Huntington-avenue bridge (over Boston & Albany Railroad).		
Sheathed, also patched sheathing.		
Labor	\$58 25	
Material	378 27	
	<hr/>	436 52
Irvington-street [foot] bridge (over New York, New Haven & Hartford Railroad, Providence Division).		
Patched platform.		
Labor	\$8 00	
Material	76	
	<hr/>	8 76
<i>Carried forward</i>		<hr/> \$11,604 92

STREET DEPARTMENT — BRIDGE DIVISION. 19

<i>Brought forward</i>	\$11,604 92	
Keyes-street bridge (over Stony brook).		
Repaired fence.		
Labor		1 25
Lehigh-street fence (under Broadway bridge).		
Repaired fence four times.		
Labor	\$43 75	
Material	19 15	
		62 90
Linden Park-street bridge (over Stony brook).		
Sheathed, repaired supports, and patched sheathing.		
Labor	\$67 75	
Material	55 50	
		123 25
Massachusetts-avenue bridge (over Boston & Albany Railroad).		
New deck in part, sheathed the bridge entire, patched deck and sheathing, scraped and painted iron beams and fence.		
Labor	\$476 25	
Material	532 87	
		1,009 12
Massachusetts-avenue bridge (over New York, New Haven & Hartford Railroad, Providence Division).		
Sheathed the bridge entire, and built new sidewalk on north-easterly side.		
Labor	\$138 25	
Material	230 81	
		369 06
Mattapan bridge (from Dorchester to Milton).		
New stringers, deck, sheathing, and sidewalk.		
Labor	\$245 75	
Material	523 93	
		769 68
NOTE. — One-half of this amount was paid by Metropolitan Park Commission, they paying as an offset, bill for lumber used on Swett street.		
Milton bridge (from Dorchester to Milton).		
New sidewalk, old one repaired twice.		
Labor	\$59 25	
Material	25 66	
		84 91
<i>Carried forward</i>	\$14,025 09	

<i>Brought forward</i>		\$14,025 09
Shawmut-avenue bridge (over Boston & Albany and New York, New Haven & Hartford Railroad, Providence Division).		
Sheathed and repaired old sheathing.		
Labor	\$52 00	
Material	104 45	
		156 45
Swett-street bridge (east of New York, New Haven & Hartford Railroad, Midland Division).		
Patched sheathing, put in new deck, sheathed, repaired foundations, and painted fence.		
Labor	\$1,028 00	
Material	803 70	
		1,831 70
NOTE. — Lumber to the amount of \$388.50 used, not included in the above, was paid for by Metropolitan Park Commission as an offset to work done on Mattapan bridge.		
West Fourth-street bridge (over New York, New Haven & Hartford Railroad, Plymouth Division).		
Patched deck and sheathing under nine different orders, sheathed and put in new sidewalk in part.		
Labor	\$767 38	
Material	1,674 75	
		2,442 13
West Newton-street bridge (over New York, New Haven & Hartford Railroad, Providence Division).		
Patched deck and sheathing three times, sheathed north-easterly roadway, and painted fence.		
Labor	78 50	
Material	72 07	
		150 57
West Rutland-square [foot] bridge (over New York, New Haven & Hartford Railroad, Providence Division).		
Built new sand-box.		
Labor	\$11 50	
Material	1 09	
		12 59
Williams-street bridge (over Stony brook), and culvert at the brook.		
Patched deck and sheathing on both.		
Labor	\$42 25	
Material	204 67	
		246 92
<i>Carried forward</i>		\$18,865 45

STREET DEPARTMENT — BRIDGE DIVISION. 21

<i>Brought forward</i>	.	.	.	.	.	.	\$18,865 45
Sundry expenditures on inland bridges.						.	
Cleaning, removing snow, and small repairs.							
Labor	.	.	.	.	.	.	\$963 88
Material	.	.	.	.	.	.	313 81
							<hr/>
							1,277 69
							<hr/>
Total expended on inland bridges .						.	<u><u>\$20,143 14</u></u>

RECAPITULATION.

Table showing Expenditures on the Inland Bridges, from February 1, 1900, to January 31, 1901.

Name of Bridge.	Repairs, Labor, Lumber, Ironwork, and Painting.
Albany street	\$1,014 06
Allston	3,244 38
Ashland street	109 57
Ashmont	8 13
Athens street	42 25
Beacon street (over B. & A. Railroad)	366 06
Beacon street (over water-way)	183 66
Beech street (culvert)	23 56
Berkeley street (over B. & A. Railroad)	208 63
Berkeley street (over N. Y., N. H. & H. R.R., Providence Division, old location)	272 12
Blakemore street	850 44
Boylston street (over B. & A. Railroad)	1,028 96
Broadway (over B. & A. Railroad)	132 44
Brookline avenue	267 41
Byron street	110 04
Columbus avenue	151 88
Cornwall street	72 64
Cottage Farm	62 00
Cottage street	756 96
Dartmouth street	1,709 43
Dorchester street	64 28
Everett street	181 78
Ferdinand street	79 96
Florence street	75 29
Gold street	143 71
Huntington avenue	436 52
Irvington street	8 76
Keyes street	1 25
Lehigh street (fence)	62 90
Linden Park street	123 25
Massachusetts avenue (over B. & A. Railroad)	1,009 12
Massachusetts avenue (over N. Y., N. H. & H. R.R., Providence Division)	369 06
Mattapan	769 68
Milton	84 91
Shawmut avenue	156 45
Swett street (east)	1,831 70
West Fourth street	2,442 13
West Newton street	150 57
West Rutland square	12 59
Williams street	246 92
Sundry expenditures	1,277 69
Total	<u>\$20,143 14</u>

MAINTENANCE EXPENSES AT NORTH AND SOUTH YARDS.

NORTH YARD, DISTRICT NO. 1.

Warren Bridge.

Messenger and watchmen	\$2,130 51	
Tools	90 93	
Supplies	177 99	
Repairing building	181 38	
	<hr/>	\$2,580 81

STABLE, DISTRICT NO. 1.

Warren Bridge.

Teamster and hostler	\$1,732 00	
Harness, feed, and supplies	618 89	
	<hr/>	2,350 89
Total expended, North Yard and Stable		<u><u>\$4,931 70</u></u>

SOUTH YARD, DISTRICT NO. 2.

No. 45 Foundry Street.

Messenger, watchmen, and yardman	\$3,230 29	
Labor in yard	270 75	
Tools	180 42	
Supplies	292 44	
	<hr/>	\$3,973 90

STABLE, DISTRICT NO. 2.

323 West Fourth Street.

Teamster and driver	\$1,556 13	
Board of horses	1,610 18	
Repairing vehicles, horse-shoeing, feed, harness, and supplies	1,579 31	
	<hr/>	4,745 62
Total expended, South Yard and Stable		<u><u>\$8,719 52</u></u>

SPECIAL APPROPRIATIONS.

IN CHARGE OF BRIDGE DIVISION.

Congress-street bridge, reconstruction (over Fort Point channel).

Repairing pier and resetting spurshores,	\$825 00
Repairing machinery, and ironwork .	345 89
Lumber and hardware for draw and shelter-houses	483 48
Paving roadway	380 00
Labor on shelter-house No. 1 . . .	290 00

Amount expended January 31, 1901 . . .	\$2,324 37
Transferred to Street Improvements, Ward 7 .	1,374 88

Appropriation on hand February 1, 1900 was,	<u>\$3,699 25</u>
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Dover-street bridge, tearing out old work (over Fort Point channel).

Inspector	\$84 00
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Amount expended January 31, 1901 . . .	\$84 00
Balance	1,916 00

Appropriation	<u>\$2,000 00</u>
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Harvard-street bridge, reconstruction (over New York, New Haven & Hartford Railroad, Midland Division).

Rent for new sidewalks	\$2 00
Transferred to Street Improvements, Ward 24	2,043 76

Appropriation on hand February 1, 1900, was	<u>\$2,045 76</u>
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Warren bridge, redecking old piers (Boston to Charlestown).

Labor	\$1,059 42
Material	2,940 58

Amount of appropriation	<u>\$4,000 00</u>
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Winthrop bridge (from Breed's Island to Winthrop).

Inspector	\$60 00
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Amount expended January 31, 1901 . . .	\$60 00
Balance	940 00

Appropriation	<u>\$1,000 00</u>
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AMOUNTS CHARGED TO SPECIAL APPROPRIATIONS IN CHARGE OF
OTHER DIVISIONS.

Chelsea bridge [North] (over North channel, Mystic river).	
Salary of extra draw-tender	<u>\$304 61</u>
[Charged to Chelsea bridge, widening opening, North draw.]	

AWARDS OF COMMITTEE ON CLAIMS.

N. P. Doane, damage to tug "N. P. Doane"		\$213 00
Tug "Jennie" and others, damage		75 00
Anthony Q. Martin, personal injuries,		50 00
		<u>\$338 00</u>
[Charged to Reserve Fund.]		

LIST OF BOSTON BRIDGES.

I. — BRIDGES WHOLLY MAINTAINED BY BOSTON.

[In the list those marked with an asterisk (*) are over navigable waters, and are each provided with a draw.]

In Charge of Bridge Division.

- Allston, over Boston & Albany Railroad at Cambridge street, Brighton.
- Ashland street, over N. Y., N. H. & H. Railroad, Providence Division, West Roxbury.
- Athens street, over N. Y., N. H. & H. Railroad, Midland Division.
- Baker street, at Brook farm, West Roxbury.
- Beacon street, over outlet to Back Bay Fens.
- Beacon street, over Boston & Albany Railroad.
- Berkeley street, over Boston & Albany Railroad.
- Berkeley street over N. Y., N. H. & H. Railroad. (Old location.)
- Berwick park (foot-bridge), over N. Y., N. H. & H. Railroad, Providence Division.
- Blakemore street, over N. Y., N. H. & H. Railroad, Providence Division.
- Bolton street, over N. Y., N. H. & H. Railroad, Midland Division.
- Boylston avenue, over Stony brook, West Roxbury.
- Boylston street, over Boston & Albany Railroad.
- * Broadway, over Fort Point channel.

Broadway, over Boston & Albany Railroad.
Brookline avenue, over Boston & Albany Railroad.
Byron street, over Boston, Revere Beach & Lynn Railroad.
* Charlestown, from Boston to Charlestown.
* Chelsea [South] over south channel, Mystic river.
* Chelsea street, from East Boston to Chelsea.
Columbus avenue, over Boston & Albany Railroad.
* Commercial Point, or Tenean, Dorchester.
* Congress street, over Fort Point channel.
Cornwall street, over Stony brook, West Roxbury.
Cottage Farm, over Boston & Albany Railroad, at Commonwealth avenue.
Cottage street (foot-bridge), over flats, East Boston.
Dartmouth street, over Boston & Albany Railroad.
* Dover street, over Fort Point channel.
Elmwood street (private way), over Stony brook, Roxbury.
* Federal street, over Fort Point channel.
Ferdinand street, over Boston & Albany Railroad.
Florence street, over Stony brook, West Roxbury.
Gold street (foot-bridge), over N. Y., N. H. & H. Railroad, Midland Division.
Huntington avenue, over Boston & Albany Railroad.
Hyde Park avenue, over Stony brook, West Roxbury.
Irvington street (foot-bridge), over N. Y., N. H. & H. Railroad, Providence Division.
Keyes street, over Stony brook, West Roxbury.
* L street, over reserved channel at junction of Congress and L streets.
Leyden street, over Boston, Revere Beach & Lynn Railroad.
Linden Park street, over Stony brook, Roxbury.
* Malden, from Charlestown to Everett.
Massachusetts avenue, over Boston & Albany Railroad.
Massachusetts avenue, over N. Y., N. H. & H. Railroad, Providence Division.
* Meridian street, from East Boston to Chelsea.
* Mount Washington avenue, over Fort Point channel.
Shawmut avenue, over Boston & Albany and N. Y., N. H. & H. Railroad, Providence Division.
Silver street, over N. Y., N. H. & H. Railroad, Midland Division.
Summer street, over A street.
Summer street, over B street.
Summer street, over C street.
* Summer street, over Fort Point channel.
Swett street, east of N. Y., N. H. & H. Railroad, Midland Division.
Swett street, west of N. Y., N. H. & H. Railroad, Midland Division.
Texas street, over Stony brook, Roxbury.
* Warren, from Boston to Charlestown.

West Newton street, over N. Y., N. H. & H. Railroad, Providence Division.

West Rutland square (foot-bridge), over N. Y., N. H. & H. Railroad, Providence Division.

Williams street, over Stony brook, West Roxbury.

Winthrop, from Breed's Island to Winthrop.

In Charge of Park Department.

Agassiz, in Back Bay Fens.

Arborway, over Stony brook.

Arborway, Railroad viaduct.

Audubon road, over Boston & Albany Railroad.

Boylston street, in Back Bay Fens.

Bridle path, in the Riverway, over Muddy river.

* Castle Island (foot-bridge) from Marine park, South Boston, to Castle Island.

Chapel Arch, foot-bridge in the Riverway.

Charlesgate, Back Bay Fens, over Boston & Albany Railroad.

Charlesgate [West], over Ipswich street.

Circuit drive, over Scarboro' pond, in Franklin park.

Commonwealth avenue, in Back Bay Fens.

Ellicott arch, in Franklin park.

Fen, Back Bay Fens.

Forest Hills entrance, in Franklin park.

Ipswich street, over Waterway in Fens.

Leverett pond (foot-bridge), in Leverett park.

Neptune road, over Boston, Revere Beach & Lynn Railroad.

Overlook Arch, Franklin park.

Scarboro' pond (foot-bridge), in Franklin park.

Stony brook, Back Bay Fens.

Wood Island Park (foot-bridge), over Boston, Revere Beach & Lynn Railroad.

In Charge of Public Grounds Department.

Public Garden (foot-bridge).

II. — BRIDGES OF WHICH BOSTON MAINTAINS THE PART WITHIN ITS LIMITS.

In Charge of Bridge Division.

Central avenue, from Dorchester to Milton.

* Chelsea [North], from Charlestown to Chelsea.

* Granite, from Dorchester to Milton.

Mattapan, from Dorchester to Milton.

Milton, from Dorchester to Milton.

* Neponset, from Dorchester to Quincy.

* North Beacon street, from Brighton to Watertown.

Spring street, from West Roxbury to Dedham.

* Western avenue, from Brighton to Watertown.

In Charge of Park Department.

Bellevue street, in the Riverway, over Muddy river.
Brookline avenue, in the Riverway, over Muddy river.
Chapel, in the Riverway, over Muddy river.
Longwood avenue, from Roxbury to Brookline.
Tremont street, in the Riverway, over Muddy river.

III. — BRIDGES OF WHICH BOSTON PAYS A PART OF THE COST
OF MAINTENANCE.

In Charge of Bridge Division.

Albany street, over Boston & Albany Railroad.
Ashmont, junction Dorchester avenue and Talbot avenue, over
N. Y., N. H. & H. Railroad, Plymouth Division.
Boston street, over N. Y., N. H. & H. Railroad, Plymouth
Division.
Chelsea bridge, over Boston & Maine Railroad.
Dorchester avenue, over N. Y., N. H. & H. Railroad, Plymouth
Division.
Dorchester street, over N. Y., N. H. & H. Railroad, Plymouth
Division.
Everett street, over Boston & Albany Railroad, Brighton.
Harvard street, over N. Y., N. H. & H. Railroad, Midland
Division.
Summer street, over N. Y., N. H. & H. Railroad, Midland Divi-
sion.
Swett street, over N. Y., N. H. & H. Railroad, Plymouth Divi-
sion.
West Fourth street, over N. Y., N. H. & H. Railroad, Plymouth
Division.

In Charge of Commissioners of Cambridge Bridges.

- * Cambridge street, from Brighton to Cambridge.
- * Canal, from Boston to Cambridge.
- * Essex street, from Brighton to Cambridge.
- * Harvard, from Boston to Cambridge.
- * North Harvard street, from Brighton to Cambridge.
- * Prison Point, from Charlestown to Cambridge.
- * West Boston, from Boston to Cambridge.
- * Western avenue, from Brighton to Cambridge.

IV. — BRIDGES MAINTAINED BY RAILROAD CORPORATIONS.

1st. — Boston & Albany Railroad.

Harrison avenue.
Market street, Brighton.
Tremont street.
Washington street.

2d. — Boston & Maine Railroad, Eastern Division.

Main street.

Mystic avenue.

3d. — Boston & Maine Railroad, Western Division.

Main street.

Mystic avenue.

4th. — Boston, Revere Beach & Lynn Railroad.

Everett street.

5th. — New York, New Haven & Hartford Railroad, Midland Division.

Dorchester avenue.

Morton street, Dorchester.

Norfolk street, Dorchester [North].

Norfolk street, Dorchester [South].

Washington street, Dorchester.

West Broadway.

West Fifth street.

West Fourth street.

West Second street.

West Sixth street.

West Third street.

6th. — New York, New Haven & Hartford Railroad, Plymouth Division.

Adams street.

Freeport street.

Savin Hill avenue.

7th. — New York, New Haven & Hartford Railroad, Providence Division.

Albany street (new part).

Beech street, West Roxbury.

Bellevue street, West Roxbury.

Berkeley street (new part).

Broadway (new part).

Canterbury street, West Roxbury.

Castle street.

Centre and Mt. Vernon streets, West Roxbury.

Chandler street.

Columbus avenue (new part).

Dartmouth street (new part).

Dudley avenue, West Roxbury.

Ferdinand street (new part).

Harrison avenue (new part).
 Park street, West Roxbury.
 Tremont street (new park).
 Washington street (new part).

RECAPITULATION OF BRIDGES.

I. Number wholly maintained by Boston :	
In charge of Bridge Division	59
In charge of Park Department	22
In charge of Public Grounds Department .	1
	— 82
II. Number of which Boston maintains the part within its limits :	
In charge of Bridge Division	9
In charge of Park Department	5
	— 14
III. Number of which Boston pays a part of the cost of maintenance :	
In charge of Bridge Division	11
In charge of Commissioners of Boston and Cambridge Bridges	8
	— 19
IV. Number maintained by railroad corporations :	
1. Boston & Albany	4
2. Boston & Maine, Eastern Division . .	2
3. Boston & Maine, Western Division . .	2
4. Boston, Revere Beach & Lynn	1
5. New York, New Haven & Hartford, Midland Division	11
6. New York, New Haven & Hartford, Plymouth Division	3
7. New York, New Haven & Hartford, Providence Division	17
	— 40
Total number	<u>155</u>

PUBLIC LANDING-PLACES.

The following public landing-places have been built by the City, and are maintained and controlled by the Street Department:

Charles-river Avenue [Boston side].— Size, 40 × 30. Built in 1901. Moored from City's property.

East Boston, Public Landing.— Size, 18 × 30. Built in 1893. Moored at dock of East Boston Dry Dock Company. Dock and flats leased at \$250 per year.

Federal-street bridge. — Size 20×30 . Built by M. F. Sullivan, October 26, 1892. Moored from City's property.

Jeffries' Point, East Boston. — Size, 20×50 . Moored from Fitzpatrick's Wharf; \$300 per year.

CABLE-HOUSES AND BOXES.

The following is a list of cable-houses and boxes on bridges in charge of this Division :

New England Telephone and Telegraph Company :

- Chelsea [South] bridge, 1 house.
- Congress-street bridge, 2 houses.
- Dover-street bridge, 2 houses or boxes.
- Chelsea [North] bridge, 1 box.
- Chelsea-street bridge, 1 box.
- Malden bridge, 4 boxes.
- Meridian-street bridge, 2 boxes.
- Neponset bridge, 2 boxes on poles.
- Warren bridge, 2 boxes.

American Telephone and Telegraph Company

- Federal-street bridge, 1 house.
- Mt. Washington-avenue bridge, 2 boxes.
- Neponset bridge, 1 box on pole.
- Summer-street bridge, 1 box.

Merchants' Telegraph Company :

- Congress-street bridge, 2 boxes.

Postal Telegraph Cable Company :

- Congress-street bridge, 2 houses.
- Malden bridge, 2 boxes.
- Warren bridge, 2 boxes.

Boston Electric Light Company :

- Congress-street bridge, 2 boxes.

Lynn & Boston Railroad Company :

- Chelsea [North] bridge, 4 boxes.
- Chelsea [South] bridge, 8 boxes.

Boston Elevated Railway Company :

- Cambridge-street bridge, 1 house.
- Dover-street bridge, 1 house, 1 box.
- Federal-street bridge, 2 houses.
- Malden bridge, 2 houses.
- Warren bridge, 2 houses.

Boston Police Department :

- Chelsea [South] bridge, 1 box.
- Malden bridge, 2 boxes.

Boston Fire Department :

- Chelsea [North] bridge, 1 box.
- Dover-street bridge, 1 house, 1 box.
- Meridian-street bridge, 2 boxes.
- Warren bridge, 2 boxes.

LAND AND BUILDINGS, IN CHARGE OF BRIDGE DIVISION.

Broadway Bridge. — Draw-house, engine-room and storehouse.

Land, Broadway and Dorchester avenue, containing 5,516 feet.

Charlestown Bridge. — Draw-house, electrical power-room, and 6 store-houses.

Chelsea [North] Bridge. — Draw-house, storehouse and tool-house.

Chelsea [South] Bridge. — Draw-house, engine-house and tool-house.

Chelsea-street Bridge. — Tool-house.

Congress-street Bridge. — Draw-house, storehouse, tool-house, and 2 shelter-houses.

Dover-street Bridge. — Draw-house, and store-room.

Federal-street Bridge. — Draw-house, tool-house, 2 motor-houses, 1 controller-house.

L-street Bridge. — Draw-house, engine-house.

Malden Bridge. — Draw-house and tool-house.

Meridian-street Bridge. — Draw-house, tool-house and store-house.

Mt. Washington-avenue Bridge. — Draw-house and tool-house.

Neponset Bridge. — Tool-house.

Summer-street Bridge. — Draw-house, controller-house, 2 shelter-houses.

Warren Bridge. — Stable, draw-house, engine-house, boiler-house, tool-house.

Western-avenue Bridge to Watertown. — Tool-house.

List of Small Bridges or Culverts having Wooden Tops, which are repaired by Bridge Division. — Walls Repaired and Openings Cleaned by Sewer Division.

LOCATION.	Span.	Height of Opening.	Length.	Side-walls.	Covering.
	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>		
Ashland street and Canterbury, near Calvary Cemetery, West Roxbury.	7.6	5.5	75	Stone	Wood
Beach street, near Anawan avenue, at Central station, West Roxbury.	4.0	4.0	50	Stone	Wood
Cass street, near Spring-street Station, West Roxbury	7.0	3.0	21	Stone	Wood
Cohasset street, Roslindale	14.0	7.5	60	Stone	Wood
Gardner street, near Cow Island, West Roxbury	5.0	5.5	33	Wood	Wood
Jamaica street, Jamaica Plain	10.0	4.0	39	Stone	Wood
Park street, west of Dorchester avenue, Dorchester	5.0	3.7	50	Stone	Wood
Park street, west of N.Y., N.H. & H. Railroad, Dorchester	8.5	5.0	50	Stone	Wood
Spring street, near Spring-street Station, West Roxbury	2.7	2.7	63	Stone	Wood
Summer street, near Spring-street Station, West Roxbury	4.0	4.5	40	Stone	Wood
Williams street, at Stony brook, West Roxbury	5.0	5.0	50	Wood	Wood
Woodman street, Jamaica Plain	6.3	4.0	65	Stone	Wood

Table showing Width of Bridges, kind of Roadways, Sidewalks, etc., on Tide-water Bridges, 1900.

NAME OF BRIDGE.	Width of Bridge.	ROADWAY.		SIDEWALKS.		
		Width.	Kind of Roadway.	No.	Width.	Kind of Walks.
	<i>Ft. In.</i>	<i>Ft. In.</i>			<i>Ft. In.</i>	
Broadway	60 0	40 0	Plank	2	10 0	Coal-tar concrete.
Cambridge-street	40 0	32 9	"	1	6 0	Plank.
Canal	64 0	48 0	Paved	2	8 0	Brick.
Charlestown	100 0 { 1 27 9 1 22 0 1 27 9 }		"	2	10 0	Asphalt.
Chelsea, North.....	49 0	40 0	"	1	8 0	Coal-tar concrete and plank.
" South.....	50 3	41 2	"	1	8 0	Plank.
" street.....	30 0	23 2	Plank	1	6 0	"
Commercial point....	about 34 0	about 27 0	"	0		
Congress street	60 0	44 0	Paved.....	2	8 0	Coal-tar concrete.
Dover st. (over water)	60 0	40 0	"	2	10 0	Asphalt.
Essex street.....	31 0	22 8	Plank	1	7 6	Plank.
Federal street.....	69 0	49 0	Paved	2	10 0	Asphalt.
Granite	30 2	24 4	Plank	1	5 0	Plank.
Harvard	69 4	51 0	"	2	9 2	Asphalt.
L street	60 0	44 0	Paved.....	2	8 0	"
Malden	40 0	32 0	"	1	7 0	Coal-tar concrete.
Meridian street	50 0	36 0	"	2	7 0	" "
Mt. Washington ave...	61 0	39 6	"	2	10 9	" "
Neponset.....	30 0	23 10	Plank	1	5 5	Plank.
North Beacon street ..	31 0	25 2	"	1	5 0	"
North Harvard street	28 2	26 7	"	0		
Prison Point.....	50 0	36 0	{ Plank part Paved part }	2	7 0	Coal-tar concrete.
Summer street	100 0	76 0	" entire..	2	12 0	Asphalt.
Warren	30 0	60 0	Paved.....	2	10 0	Coal-tar concrete.
Western avenue to Cambridge.....	33 2	26 3	Plank	1	6 0	Plank.
Western avenue to Watertown	33 0	24 2	"	1	8 0	"
Winthrop	24 2	19 10	"	1	3 7	"
West Boston.....	50 0	36 0	Paved.....	2	7 0	Brick.

Table showing the Widths of Openings for Vessels in all Bridges provided with Draws in the City of Boston, 1900.

NAME OF BRIDGE.	Location.	Number of Openings.	Width.
Boston & Maine R.R., Eastern Division	Boston to Charlestown	1	39 feet 7 inches
Boston & Maine R.R., Eastern Division	Over Miller's river	1	35 " 6 "
Boston & Maine R.R., Fitchburg Division	Boston to Charlestown	1	36 " 0 "
Boston & Maine R.R., Fitchburg Division (for teaming freight),	" "	1	36 " 0 "
Boston & Maine R.R. (freight), Southern Division	Boston to East Cambridge,	1	40 " 2 "
Boston & Maine R.R. (passenger), Southern Division	" "	1	39 " 7 "
Boston & Maine R.R., Western Division	Boston to Charlestown	1	39 " 7 "
Boston & Maine R.R., Western Division	Over Miller's river	1	35 " 10 "
Broadway	Over Fort Point channel ..	1	43 " 6 "
Cambridge street	Brighton to Cambridge....	1	36 " 4 "
Canal (or Craigie's)	Boston to East Cambridge, ..	1	36 " 0 "
Charlestown (main channel)....	Boston to Charlestown....	2	50 " 0 "
Charlestown (north channel)....	" " ....	..	50 " 0 "
Chelsea (south channel).....	Charlestown to Chelsea....	1	38 " 9 "
Chelsea (north channel)	" "	1	60 " 0 "
Chelsea street (East Boston side),	East Boston to Chelsea....	2	36 " 0 "
Chelsea street (Chelsea side)....	" " ....	..	36 " 0 "
Commercial Point (or Tenean)...	Dorchester	1	24 " 2 "
Congress street (Boston side)....	Over Fort Point channel..	2	43 " 3 "
Congress st. (South Boston side), .....	" " " ..	..	43 " 9 "
Dover street	" " " ..	1	37 " 0 "
Essex street	Brighton to Cambridge....	1	35 " 9 "
Federal street	Over Fort Point channel..	1	41 " 10 "
Grand Junction R.R.	Brighton to Cambridge....	1	35 " 9 "
Grand Junction R.R.	East Boston to Chelsea....	1	49 " 6 "
Granite	Dorchester to Milton	1	36 " 0 "
Harvard (Boston side).....	Boston to Cambridge....	2	36 " 6 "
Harvard (Cambridge side).....	" " ....	..	36 " 10 "
L street	Over Reserved channel, South Boston	1	40 " 0 "

Table showing Width of Openings, etc. — *Concluded.*

NAME OF BRIDGE.	Location.	Number of Openings.	Width.
Malden.....	Charlestown to Everett....	1	44 feet 9 inches.
Meridian st. (East Boston side)...	East Boston to Chelsea	2	59 " 2 "
" (Chelsea side).....	" "	..	59 " 0 "
Mt. Washington avenue (Boston side).....	Over Fort Point channel...	2	42 " 2 "
Mt. Washington avenue (South Boston side).....	" "	..	43 " 9 "
Neponset.....	Dorchester to Quincy.....	1	36 " 0 "
New York, New Haven & Hart- ford R.R.....	Over South bay.....	1	28 " 4 "
New York, New Haven & Hart- ford R.R., Y connection.....	Over Fort Point channel...	..	41 " 10 "
New York, New Haven & Hart- ford R.R.....	Over Fort Point channel...	1	41 " 8 "
New York, New Haven & Hart- ford R.R.....	Dorchester to Quincy.....	1	35 " 10 "
North Beacon street.....	Brighton to Watertown....	1	30 " 0 "
North Harvard street.....	Brighton to Cambridge....	1	36 " 0 "
Prison Point.....	Charlestown to Cambridge	1	36 " 0 "
Summer street	Over Fort Point channel...	1	50 " 0 "
Warren.....	Boston to Charlestown....	1	36 " 0 "
West Boston.....	Boston to Cambridge	1	36 " 0 "
Western avenue.....	Brighton to Cambridge....	1	36 " 0 "
"	Brighton to Watertown....	1	35 " 10 "

DRAW-TENDERS' REPORTS.*

Giving Number of Vessels passing through Drawbridges Controlled by the City of Boston from February 1, 1900,
to January 31, 1901.

BRIDGE.	STEAMERS.		SAILING VESSELS.			TUGS.		ALL OTHERS.			TOTAL NUMBER OF VESSELS.			Total number of Carriages.	Total Number of Openings.		
	By Day.	By Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.					
Broadway	8	.....	8	1,278	352	1,630	3,355	511	3,866	1,612	301	1,913	6,253	1,164	7,417	1,663	3,749
Charlestown	79	14	93	1,258	369	1,627	3,856	690	4,546	1,692	401	2,333	7,125	1,414	8,539	1,917	3,767
Chelsea (North)	433	75	508	766	134	900	7,849	1,562	9,411	3,341	794	4,135	12,389	2,565	14,954	2,588	8,888
Chelsea (South)	35	5	40	988	59	1,047	3,194	1,175	3,369	1,472	49	1,521	5,083	288	5,977	1,446	4,361
Chelsea street	1	.....	1	19	3	22	127	5	132	73	2	75	220	10	230	33	162
Congress street	79	12	91	1,561	355	1,916	6,286	977	7,263	2,668	421	3,089	10,594	1,705	12,359	2,049	6,825
Dover street	5	1	6	1,114	374	1,488	2,665	640	3,305	1,238	323	1,561	5,022	1,338	6,360	1,661	4,044
Federal street	9	1	10	1,256	403	1,659	3,406	627	4,033	1,528	347	1,875	6,160	1,378	7,577	1,821	5,082
Granite	.....	.....	.....	28	.....	28	234	1	235	92	.....	92	354	1	355	51	206
L street	.....	.....	.....	205	77	372	1,877	265	2,142	1,747	363	2,110	8,919	705	4,624	560	3,297
Malden	4	.....	4	287	25	312	1,842	256	2,098	899	127	1,026	3,032	408	3,440	622	1,380
Meridian	55	13	68	455	32	487	5,356	1,093	6,449	2,652	509	3,161	8,318	1,647	10,165	1,890	6,273
Mt. Washington avenue	52	7	59	1,392	325	1,717	5,404	751	6,155	2,446	359	2,845	9,294	1,452	10,746	2,523	5,566
Neponset	.....	.....	.....	26	.....	26	212	2	214	127	1	128	565	3	568	52	209
No. Beacon street	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Summer street	80	11	91	1,531	324	1,855	6,283	877	7,160	2,600	418	3,018	10,494	1,630	12,124	2,162	4,857
Warren	12	.....	12	1,197	357	1,554	6,437	647	4,084	1,867	457	2,324	6,513	1,461	7,974	1,838	4,927
Western avenue to Watertown	.....	.....	.....	4	.....	4	146	76	232	51	3	54	201	79	280	39	226
Totals	832	139	991	13,455	3,129	16,584	55,929	9,155	64,684	26,345	4,915	31,260	96,181	17,338	113,519	22,645	70,789

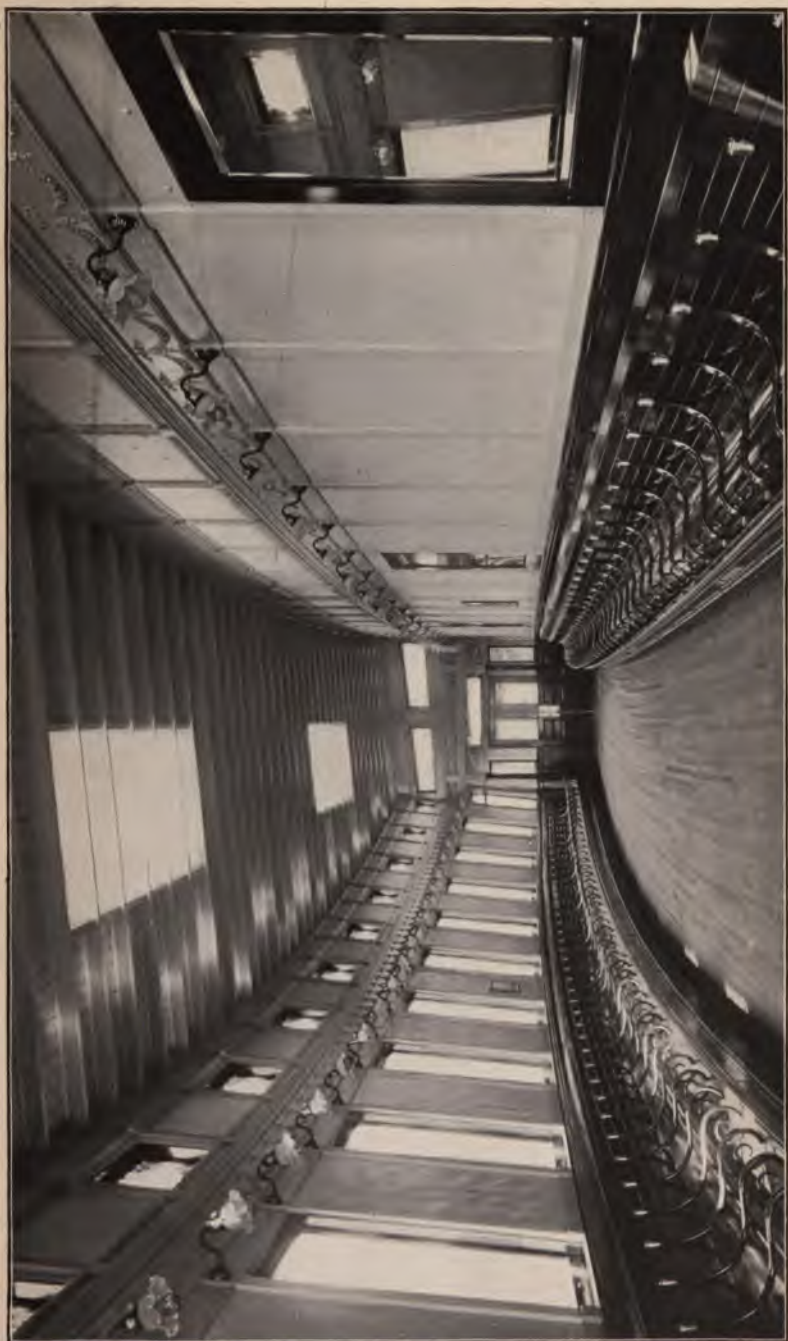
* West Boston, Cambridge street, Essex street, North Harvard street, Western avenue to Cambridge, Prison Point, Canal (or Cralgie's) and Harvard Bridges are not included in this table, being in the care of Commissioners representing the two cities (Boston and Cambridge) connected by these bridges.

DRAW-TENDERS' REPORTS.*

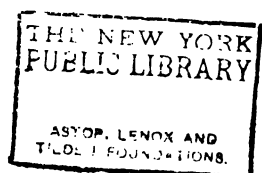
Number of Vessels passing through Drawbridges controlled by the City of Boston, from Feb. 1, 1896, to Feb. 1, 1901.

NAME OF BRIDGE.	STEAMERS.					SAILING VESSELS.					TUGS.					ALL OTHERS.					TOTAL NUMBER OF VESSELS.					TOTALS
	1896.	1897.	1898.	1899.	1900.	1896.	1897.	1898.	1899.	1900.	1896.	1897.	1898.	1899.	1900.	1896.	1897.	1898.	1899.	1900.	1896.	1897.	1898.	1899.	1900.	
Broadway.....	22	8	13	4	8	2,082	2,905	2,408	2,300	1,630	2,358	3,507	3,035	3,954	3,896	890	1,209	1,225	1,783	1,913	6,352	7,719	6,087	5,050	7,417	36,325
Charles River.....	38	48	34	55	93	2,857	2,576	2,011	1,708	1,507	4,121	4,237	4,763	3,769	4,546	2,534	2,926	2,912	2,101	2,333	3,031	3,807	9,710	7,693	8,720	36,721
Charlestown.....	150	63	90	245	608	1,159	978	1,343	950	1,967	4,373	5,156	7,892	6,985	9,411	2,223	2,709	2,709	4,148	4,133	7,630	9,056	13,082	11,304	14,354	87,639
Chelsea, North.....	150	63	90	245	608	1,159	978	1,343	950	1,967	4,373	5,156	7,892	6,985	9,411	2,223	2,709	2,709	4,148	4,133	7,630	9,056	13,082	11,304	14,354	87,639
Chelsea, South.....	280	46	39	8	40	1,200	1,345	1,197	1,050	1,047	2,748	3,373	3,200	3,322	3,330	3,414	4,063	1,120	1,251	1,521	4,361	5,757	5,556	5,053	5,977	27,406
Chelsea street.....	6	...	...	...	...	1	30	19	12	8	163	138	119	126	132	103	81	49	69	75	304	237	180	203	230	1,154
Commercial Point.....	222	113	70	113	91	4,254	4,318	3,621	2,705	1,916	8,347	9,745	8,413	8,155	7,263	3,050	3,541	3,296	3,034	3,089	15,982	17,717	15,206	14,097	12,359	75,240
Congress street.....	20	6	10	16	6	2,871	2,813	2,088	2,154	1,488	2,146	3,009	2,494	2,886	3,305	741	975	1,956	1,408	1,501	5,778	6,803	5,548	6,954	6,300	31,443
Dover street.....	17	6	15	16	10	3,393	3,199	2,549	2,378	1,658	2,941	4,025	3,764	4,177	4,033	1,083	1,226	1,533	1,747	1,875	7,434	8,466	7,861	8,318	7,577	39,646
Federal street.....	1	...	...	...	...	64	58	48	59	28	240	258	230	292	235	55	63	71	65	92	358	379	358	386	355	1,837
Grant street.....	18	4	2	...	...	730	673	556	410	372	2,556	2,066	2,200	1,684	2,142	1,228	1,219	1,536	1,600	2,110	4,432	3,962	4,314	3,994	4,624	21,326
Long street.....	4	2	...	...	...	352	460	272	254	312	1,384	1,632	1,578	1,487	2,098	961	1,059	935	866	1,026	2,701	3,163	2,987	2,907	3,440	14,498
Malden street.....	51	57	58	83	68	633	610	533	497	487	4,301	4,145	5,429	5,628	6,449	1,954	2,464	3,199	3,251	3,161	7,049	7,276	9,219	9,499	10,165	43,208
Meridian street.....	51	57	58	83	68	633	610	533	497	487	4,301	4,145	5,429	5,628	6,449	1,954	2,464	3,199	3,251	3,161	7,049	7,276	9,219	9,499	10,165	43,208
Mt. Wash. avenue.....	88	74	69	83	59	3,700	3,786	2,857	2,486	1,717	5,426	6,443	6,194	6,706	6,155	2,304	2,509	2,655	2,625	2,845	11,518	12,512	11,775	11,900	10,776	58,781
Neposet.....	...	...	...	...	...	66	57	48	68	26	250	254	258	272	214	60	66	79	86	128	376	377	385	426	368	1,932
No. Beacon street.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Summer street.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Warren street.....	42	41	36	32	12	2,320	2,476	1,834	1,834	1,554	3,007	2,981	3,338	3,979	4,084	2,143	1,766	2,071	2,222	2,334	7,512	7,364	7,279	8,067	7,974	38,006
Western avenue to Watertown.....	...	...	...	...	...	36	7	...	...	...	102	108	148	1,205	222	45	58	57	1,222	54	183	173	205	2,828	280	3,669
Totals.....	797	498	447	645	991	26,847	26,390	21,072	18,990	16,584	44,533	51,147	52,850	55,568	64,684	20,205	22,364	26,475	26,778	31,260	92,402	100,956	100,853	101,981	113,519	509,714

* West Boston, Cambridge street, Essex street, North Harvard street, Western avenue to Cambridge, Prison Point, Canal (or Craigle's) and Harvard Bridges are not included in this table, being in care of Commissioners representing the two cities (Boston and Cambridge) connected by these bridges.



FERRY-BOAT "GENERAL SUMNER," SHOWING CABIN.



APPENDIX B.

REPORT OF THE DEPUTY SUPERINTENDENT OF
THE FERRY DIVISION.

NORTH FERRY, EAST BOSTON, February 1, 1901.

MR. B. T. WHEELER,

Superintendent of Streets:

DEAR SIR, — I respectfully submit the annual report of the expenditures, income and operation of the Ferry Division, for the financial year ending January 31, 1901, and the amount of property and the condition of the same.

One new propeller boat, the "General Sumner," was built and put into commission September 4, 1900, the total cost of which was \$95,300.

The ferry-boat "Winthrop," having been in service for twenty-seven years, was sold at public auction, October 25, 1900, for \$1,199.50 net.

The propeller ferry-boat "Gov. Russell," which was repurchased from the United States Government and refitted for ferry purposes, did not go into service until January 3, 1900, so that two new propeller boats have been in commission this year. Three propeller boats run on the North Ferry, three side-wheel boats at the South Ferry; a total of six boats in commission during the year. For eleven months of last year there were only five boats running, four side-wheel and one propeller.

The increased cost of maintenance, caused by running one additional propeller boat and one propeller in place of a side-wheeler, withdrawn from the service, was about \$9,500, not including the expense for coal, which was increased about \$7,000.

At the beginning of the year \$2,000 was paid for a new shaft to replace one broken in December, 1899, and two more have since been replaced, one on the "D. D. Kelly," the other on the "Revere," a total cost of nearly \$6,000.

A new and modern coal-pocket is being erected at the South Ferry, East Boston side. Plans have been made for a

new head-house at this place, and as soon as the coal-pocket is completed work upon it will be commenced. These improvements have been needed for many years, and it is hoped that before the end of the current year this landing will have as good facilities as the others. With this exception the buildings, boats, piers and drops are in good condition.

Extraordinary repairs were found to be needed to the engines of the "Noddle Island," "Gov. Russell," and "Revere." These have been made at a cost of nearly \$2,500.

The water-closets and sinks at Boston side, South Ferry, have been connected with the sewer. This necessitated the building of nine new closets, at a cost of about \$900.

A new office has been built for the use of the Deputy Superintendent, at East Boston side, North Ferry, at a cost of about \$1,000.

Ice-water tanks have been placed in head-houses at both sides of North Ferry.

The canopies, gates and drops on both sides of the North Ferry and the head-house on Boston side, have been painted for the first time in several years.

The head-house on Boston side, North Ferry, has been wired and lighted with incandescent lights.

The piers at three of the landings have been repaired and put in good condition, at a cost of over \$2,000.

By reference to the financial statement it will be seen that the receipts fell off \$5,194.25, of which amount \$1,185.50 was the difference between the sale of the "Ben Franklin" in 1899, and the "Winthrop" this year; the balance was decrease in foot and team travel. This decrease was occasioned by the blocking up of the South Ferry, East Boston entrance, by tunnel construction, and the fact that during a greater part of the year the large steamers were not running here, being engaged in carrying troops to South Africa.

LAND AND PROPERTY OF THE FERRY DIVISION.

South Ferry, East Boston Side. — Located at the termination of Lewis street, and covers an area of 58,725 square feet of land and water. On these premises are one head-house, with canopies, one work-shop for carpenters, machinists and blacksmith, one gate-room and oil-room; all in a poor condition; three piers, which form the two slips, two drops and tanks, and one dock, where boats are laid when not in use, or while undergoing repairs.

South Ferry, Boston Side. — Located at the termination of Eastern avenue, and covers an area of 38,135 square feet of land and water, upon which are one head-house, with canopies, one gate-room, three piers, which form the two slips and two drops and tanks.

North Ferry, Boston Side. — Located at the termination of Battery street, and covers an area of 45,000 square feet of land and water, upon which are one head-house, with canopies, one gate-room, three piers, which form the two slips, and two drops and tanks.

North Ferry, East Boston Side. — Located at the termination of Border street, and covers an area of 62,138 square feet of land and water, upon which are one head-house, with canopies, one boiler and oil-room, one stable, and one coal shed, three piers, which form the two slips, and two drops and tanks.

The wharf property adjoining the premises at Boston side, South Ferry, was leased by the East Boston Ferry Company for 999 years, at an annual rental of \$4,000, which lease was assigned to the Ferry Department. The whole of it is sublet to the Penal Institutions Department for \$2,000 per year. This makes a net loss to this Division of \$2,000 a year, and, in my opinion, the Penal Institutions Department should pay the whole rental.

The following steam ferry-boats are in commission :

Name.	When built.	Kind.	Length.
Revere	1875.	Side-wheel	148 ft.
D. D. Kelly	1879.	" "	148 "
Hugh O'Brien	1883.	" "	163 "
General Hancock	1887.	" "	148 "
Noddle Island	1899.	Propeller	164 ft. 3 in.
Gov. Russell	1900.	"	164 " 3 "
General Sumner	1900.	"	164 " 3 "

Respectfully yours,

JOS. J. DENNISON,
Deputy Superintendent.

FINANCIAL STATEMENT.

REGULAR ANNUAL AND SPECIAL APPROPRIATIONS OF STREET DEPARTMENT, FERRY DIVISION, FOR THE YEAR ENDING JANUARY 31, 1901.

Appropriation for year ending January 31, 1901,	\$237,000 00
Amount of expenditures	\$236,999 91
Transferred to City Treasury	09
	<u>237,000 00</u>

OBJECTS OF EXPENDITURE.

Salaries and wages for maintenance	\$134,411 10
Salaries and wages for repairs	17,972 42
Current expenses	14,172 48
Fuel	46,378 66
Supplies for maintenance	6,366 29
Supplies for repairs	5,606 61
Repairs on boats	8,759 89
Repairs on buildings, piers and drops	2,875 68
Tools and fixtures	265 78
Incidental expenses	191 00
	<u>\$236,999 91</u>
Transferred to City Treasury	09
	<u>\$237,000 00</u>

SPECIAL APPROPRIATIONS.

Appropriation authorized and issued for new ferry landings, head-house, new boats, slips, and drops	\$500,000 00
Amount transferred by City Government January 14, 1901, approved by the Mayor, January 19, 1901, unexpended balance of appropriation for new ferry-boats	4,400 79
	<u>\$504,400 79</u>
Amount expended to February 1, 1899	\$143,393 49
Amount transferred to Sewer Division, Street Department, by order of Mayor, authorized by Acts of Legislature, chap. 450, sect. 14, 1899	200,000 00
<i>Carried forward</i>	<u>\$343,393 49</u>

STREET DEPARTMENT — FERRY DIVISION. 43

<i>Brought forward.</i>	\$343,393 49	
Amount expended from February, 1899, to February 1, 1900	12,187 69	
Amount paid on account of new ferry-boat, head-house, coal elevator and pier from February 1, 1900, to February 1, 1901	96,191 74	
	<u>\$451,772 92</u>	
Unexpended balance of appropriation January 31, 1901	52,627 87	
	<u>\$504,400 79</u>	

OBJECTS OF EXPENDITURE, NEW FERRY LANDING APPROPRIATION.

New Propeller Ferry Steamer "General Sumner,"	\$95,300 02	
William McKie, contract for building boat,	\$85,500 00	
Additional approved expenses	32 00	
	<u>\$85,532 00</u>	
R. F. Keough, for plans, etc., and superintending construction	3,373 91	
Knowles Steam Pump Works, contract for pumps	1,570 00	
Hawks Electric Company, electric light plant	3,520 00	
Charles Cory & Son, transmitters,	220 88	
B. F. Sturtevant Co., 30-inch blower	187 00	
C. W. Trainer Manufacturing Company, asbestos covering	595 00	
Sundry bills for material	301 23	
	<u>\$95,300 02</u>	
Amount paid on account of new head-house, South Ferry, East Boston	49 12	
Amount paid on account of new coal elevator, South Ferry, East Boston	16 00	
Amount paid on new pier, North Ferry, East Boston	826 60	
	<u>\$96,191 74</u>	
Total expenditure of year ending January 31, 1901		<u>\$96,191 74</u>

SPECIAL APPROPRIATION FOR NEW FERRY-BOATS.

Amount apportioned for the repurchase and refitting of ferry-boat "Gov. Russell"	\$57,500 00
--	-------------

Amount expended previous to January 31, 1900, as per last report,	\$44,317 40	
Amount expended from January 31, 1900, to January 31, 1901,	8,781 81	
	<hr/>	
Total cost of refitting . . .	\$53,099 21	
Unexpended balance of appropriation transferred by order of City Government to New Ferry Landing appropriation . . .	4,400 79	
	<hr/>	
		<u><u>\$57,500 00</u></u>

TOTAL APPROPRIATIONS.

Annual appropriation for maintenance	\$237,000 00	
New Ferry Landing appropriation . . .	\$500,000 00	
Less previously expended . . .	355,581 18	
	<hr/>	
	144,418 82	
Appropriation for new ferry-boats . . .	\$128,500 00	
Less previously expended . . .	115,317 40	
	<hr/>	
	13,182 60	
	<hr/>	
		<u><u>\$394,601 42</u></u>

TOTAL EXPENDITURES.

Annual appropriation for maintenance	\$236,999 91	
New Ferry Landing appropriation,	96,191 74	
Appropriation for new ferry-boats,	8,781 81	
	<hr/>	
	341,973 46	
	<hr/>	
		<u><u>\$52,627 96</u></u>

BALANCES UNEXPENDED.

Annual appropriation for maintenance	\$0 09	
New Ferry Landing appropriation	48,227 08	
Appropriation for new ferry-boats, transferred to New Ferry Landing appropriation	4,400 79	
	<hr/>	
		<u><u>\$52,627 96</u></u>

STREET DEPARTMENT — FERRY DIVISION. 45

INCOME.

Cash receipts from February 1, 1900, to February 1, 1901.

From Tollmen :

For 11,817,257 foot-passengers, at 1 cent . . . \$118,172 57
 sales of strip team-tickets . . . 25,521 00

From Gatemen :

For 272,546 foot-passengers, at 1 cent . . . 2,725 46
 cash fares for teams . . . 14,263 96

At office of City Collector :

From sale of ferry-boat "Winthrop" \$1,210 00
 Less net expenses of sale . . . 10 50

1,199 50
 From sales of foot-passers by requisitions . . . 391 60
 sales of strip team-tickets by requisitions . . . 56 00
 rents . . . 2,578 34
 National Automatic Machine Company . . . 200 00

At office of Ferry Division :

From sales of foot-passes . . . 110 62
 sales of strip team-tickets . . . 1,259 58
 sales of old material . . . 176 75
 boat privileges to boot-blacks . . . 175 50

Total receipts of the year . . . \$166,830 88

STATEMENT SHOWING RECEIPTS AT EACH FERRY.

North Ferry.

	From Tollman.	Foot Passengers.	Team-tickets.	Total.
No. 2.....		\$12,432 23	\$2,000 50	\$14,432 73
" 3.....		12,293 95	1,925 00	14,218 95
" 5.....		12,448 34	2,142 00	14,590 34
" 6.....		12,261 78	2,314 50	14,576 28
" 9.....		12,172 80	2,026 50	14,199 30
" 10.....		12,504 08	1,873 50	14,377 58
" 13.....		12,232 50	2,377 50	14,610 00
		\$86,345 68	\$14,659 50	\$101,005 18

From Tollmen \$101,005 18

From Gateman :

For 183,046 foot-passengers, at 1 c. \$1,830 46
 cash fares for teams . . . 7,950 33
 9,780 79

Total at North Ferry \$110,785 97

South Ferry.

From Tollman.	Foot-Passengers.	Team-Tickets.	Total.
No. 1.....	\$7,407 50	\$2,550 00	\$9,957 50
" 4.....	7,374 23	2,586 50	9,960 73
" 7.....	7,738 01	2,798 50	10,536 51
" 8.....	7,217 94	2,756 00	9,973 94
" 11.....	978 65	81 50	1,060 15
" 12.....	1,110 56	89 00	1,199 56
	<u>\$31,826 89</u>	<u>\$10,861 50</u>	<u>\$42,688 39</u>

From Tollmen \$42,688 39

From Gatemen :

For 89,500 foot-passengers, at 1 cent \$895 00

Cash fares for teams . . . 6,813 63

7,208 63

Total at South Ferry \$49,897 02

North and South Ferries as above . . . \$160,682 99

Tickets paid for at office of City Collector . . 447 60

Tickets paid for at office of Ferry Division . . 1,370 20

Total ferriage receipts . . . \$162,500 79

Sale of ferry-boat "Winthrop" . . . 1,199 50

Rents, head-house and bootblack privileges . . 2,953 84

Sales of old material . . . 176 75

Total cash receipts as above . . . \$166,830 88

CASH STATEMENT.

From February 1, 1900, to February 1, 1901.

Dr.

To cash received from all sources . . . \$166,830 88

Cr.

By amount paid City Collector. . 166,820 33

Amount of rejected coin . . . 10 55

\$166,830 88

STATEMENT OF RECEIPTS.

From April 1, 1870, to February 1, 1901.

Cash received for tolls from April 1, 1870, to February 1, 1897 .	\$4,411,901 68	
Cash received for tolls from February 1, 1897, to February 1, 1898	168,083 88	
Cash received for tolls from February 1, 1898, to February 1, 1899	162,078 87	
Cash received for tolls from February 1, 1899, to February 1, 1900	166,572 31	
Cash received for tolls from February 1, 1900, to February 1, 1901	162,500 79	
	<hr/>	\$5,071,137 53
Cash received for rent	\$52,752 96	
Cash received for old boats	76,331 21	
Cash received for one new boat	71,000 00	
Cash received from all other sources	11,166 76	
	<hr/>	211,250 93
Total receipts in 30 years and 10 months .	\$5,282,388 46	

CASH STATEMENT.

*From April 1, 1870 (date of purchase by the City of Boston of the East Boston Ferries), to February 1, 1901.**Dr.*

To receipts from all sources in 30 years 10 months	\$5,282,388 46
--	----------------

Cr.

By amount paid to City Collector, \$5,281,716 72	
By cash with tollmen as capital	575 00
By counterfeit and rejected money in 30 years 10 months	96 74
	<hr/>
	\$5,282,388 46

EXPENDITURES.

From March 4, 1857, to April 1, 1870.

Amount charged to the East Boston Ferries by Auditor previous to purchase:

For avenues . . \$250,000 00

For repairs . . . 65,815 68

\$315,815 68

For ferry property purchased

April 1, 1870 276,375 00

\$592,190 68

Amount of expenditure from April

1, 1870, to February 1, 1897 . \$6,151,147 67

Amount of expenditure from Feb-

ruary 1, 1897, to February 1,

1898

270,026 45

Amount of expenditure from Feb-

ruary 1, 1898, to February 1,

1899

342,908 06

Amount of expenditure from Feb-

ruary 1, 1899, to February 1,

1900

289,469 56

Amount of expenditure from Feb-

ruary 1, 1900, to February 1,

1901

341,973 46

7,395,525 20

\$7,987,715 88

DEDUCT.

Amount paid to City Treasury 5,281,716 72

Net cost of ferries to City to date, not including

interest on loans \$2,705,999 16

STATEMENT SHOWING THE ACTUAL STANDING OF FERRY DIVISION,
STREET DEPARTMENT, WITH THE CITY OF BOSTON, FEBRUARY
1, 1901.*Dr.*

Amount paid previous to April 1, 1870 . . . \$592,190 68

Amount paid from April 1, 1870, to February 1,

1901, as follows:

Seven ferry steamers 618,070 58

New buildings, piers, and drops 443,103 94

Fuel 1,052,858 01

Repairs of all kinds 707,309 78

Carried forward \$3,413,532 94

STREET DEPARTMENT—FERRY DIVISION. 49

<i>Brought forward</i>	.	.	.	.	.	\$3,413,532	94
Salaries and wages	.	.	.	.	.	3,532,288	46
Tools and fixtures	.	.	.	.	.	14,529	08
Land from Lincoln's Wharf in 1887	.	.	.	.	.	5,562	52
Land from Battery Wharf in 1893	.	.	.	.	.	10,000	00
All other expenses	.	.	.	.	.	1,011,802	88
						<u>\$7,987,715</u>	<u>88</u>

Cr.

By amount paid the City for income	.	.	.	.	.	\$5,281,726	81
amount charged to ferry property for avenues that were laid out as streets, August, 1880, and which should be credited to this Division,						250,000	00
rents prior to 1881	.	.	.	.	.	60,277	56
paving avenues	.	.	.	.	.	11,530	84
estimated value of six ferry steamers	.	.	.	.	.	\$172,438	91
"Gov. Russell," added January 1, 1900	.	.	.	.	.	53,099	21
"General Sumner," added Sep- tember 4, 1900	.	.	.	.	.	95,300	02
						<u>\$320,838</u>	<u>14</u>
less 13 months' dis- count at 6 per cent. per annum on "Gov. Russell"						\$3,451	44
less five months' dis- count on "Gen- eral Sumner"						2,382	50
less twelve months' discount on other boats	.	.	.	.	.	10,346	33
						<u>16,180</u>	<u>27</u>
						\$304,657	87
deduct sale of ferry-boat "Win- throp"	.	.	.	.	.	1,199	50
						<u>303,458</u>	<u>37</u>
estimated value of real estate and franchise as per last re- port	.	.	.	.	.	\$710,800	00
added during the past year	.	.	.	.	.	900	00
						<u>711,700</u>	<u>00</u>
amount not yet charged to new buildings	.	.	.	.	.	11	33
amount paid for awning, North Ferry, East Boston	.	.	.	.	.	742	94
						<u>\$6,619,447</u>	<u>85</u>
<i>Carried forward</i>	.	.	.	.	.

<i>Brought forward</i>	\$6,619,447 85
By amount paid for new clock, South Ferry, Boston	474 79
land from Lincoln's Wharf	5,562 52
land from Battery Wharf	10,000 00
amount expended on Eastern-avenue Wharf	1,499 46
estimated value of tools and fixtures	6,000 00
estimated value of fuel on hand	8,157 25
estimated value of supplies on hand	2,712 80
cash with tollmen as capital	575 00
amount charged to new head-house, South Ferry, East Boston	49 12
amount charged to new coal elevator, South Ferry, East Boston	16 00
profit and loss in 30 years and 10 months	1,333,221 09
	<hr/>
	<u>\$7,987,715 88</u>

STATEMENT SHOWING THE DIFFERENCE OF TRAVEL ON THE FERRIES
FROM FEBRUARY 1, 1900, TO FEBRUARY 1, 1901.

	<i>North Ferry.</i>	<i>South Ferry.</i>
Foot-passengers, at 1 cent each	8,817,614	3,272,189
Foot-passengers, by ticket	104,941	49,133
Foot-passengers, free	60,502	5,304
	<hr/>	<hr/>
Total foot-passengers	<u>8,983,057</u>	<u>3,326,626</u>
One-horse teams and pleasure carriages	413,570	266,176
Two-horse teams	103,625	106,765
Three-horse teams	4,631	3,755
Four-horse teams	6,219	6,125
Two-horse pleasure carriages and hacks	10,656	4,734
Hand-carts, etc.	4,020	1,527
Drag wheels	35	25
Free teams	<u>5,210</u>	<u>1,379</u>

**Total Travel on both Ferries from February 1, 1896, to
February 1, 1901.**

	From Feb. 1, 1896, to Feb. 1, 1897.	From Feb. 1, 1897, to Feb. 1, 1898.	From Feb. 1, 1898, to Feb. 1, 1899.	From Feb. 1, 1899, to Feb. 1, 1900.	From Feb. 1, 1900, to Feb. 1, 1901.
One-horse teams.....	733,478	738,514	685,422	689,754	679,746
Two-horse teams.....	219,306	240,434	207,402	230,100	210,390
Three-horse teams.....	9,290	7,716	9,474	10,355	8,376
Four-horse teams.....	14,902	14,961	15,311	15,360	12,344
Two-horse carriages and hacks.....	16,299	14,659	13,582	14,764	15,390
Two-cent tolls for hand- carts, etc.....	8,321	8,819	6,850	6,076	5,547
Drag-wheels, etc.....	76	75	99	66	60
Foot-passengers.....	12,034,300	12,466,272	12,182,842	12,453,163	12,243,877

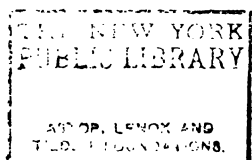
TICKET STATEMENT.

Foot-passes outstanding February 1, 1900	202,759
Sold during the year	110,620
Delivered on requisition	44,110
	<u>357,489</u>
Received and destroyed	154,074
	<u>203,415</u>
Outstanding February 1, 1901	
One-horse team-tickets outstanding February 1, 1900	66,810
Sold during the year	329,456
Delivered on requisitions	1,328
	<u>397,594</u>
Received and destroyed	345,218
	<u>52,376</u>
Outstanding February 1, 1901	
Two-horse team-tickets outstanding February 1, 1900	34,869
Sold during the year	189,392
Delivered on requisitions	672
	<u>224,933</u>
Received and destroyed	189,724
	<u>35,209</u>
Outstanding February 1, 1901	

Three-horse team-tickets outstanding February 1, 1900	2,350
Sold during the year	8,190
	<hr/>
	10,540
Received and destroyed	7,308
	<hr/>
Outstanding February 1, 1901	3,232
	<hr/>
Four-horse team-tickets outstanding February 1, 1900	5,161
Sold during the year	11,400
	<hr/>
	16,561
Received and destroyed	11,341
	<hr/>
Outstanding February 1, 1901	5,220
	<hr/>
One-horse carriage-tickets outstanding February 1, 1900	19,068
Sold during the year	39,860
Delivered on requisitions	100
	<hr/>
	59,028
Received and destroyed	39,769
	<hr/>
Outstanding February 1, 1901	19,259
	<hr/>
Two-horse carriage-tickets outstanding February 1, 1900	3,047
Sold during the year	7,900
	<hr/>
	10,947
Received and destroyed	7,683
	<hr/>
Outstanding February 1, 1901	3,264
	<hr/>



COMMONWEALTH AVENUE, NORTH OF WALLINGFORD ROAD, SHOWING UPPER AND LOWER ROADWAYS AND RESERVED SPACE FOR ELECTRIC CARS.



APPENDIX C.

REPORT OF THE DEPUTY SUPERINTENDENT OF THE PAVING DIVISION.

ROOM 44, CITY HALL, BOSTON, February 1, 1901.

MR. B. T. WHEELER, *Superintendent of Streets* :

DEAR SIR, — I respectfully submit the annual report of the expenditures and income of the Paving Division of the Street Department for the financial year ending January 31, 1901, showing the nature of the work, the number and variety of permits issued, and the details of expenditures involved in paving, macadamizing, regulating, and constructing various streets.

The Paving Division has charge of the following work :

The maintenance and rebuilding of street surfaces and sidewalks.

The placing of street signs.

The numbering of buildings.

The issuing of permits to open or occupy the streets, or for such other purpose as may be required under the ordinances.

The removal of snow and ice from the streets, gutters and plank walks.

The cleaning of streets in the outlying sections of the City not covered by the Street Cleaning Division.

The Division is in charge of a Deputy Superintendent, with a clerical force under the direction of a chief clerk and an engineering force under the direction of a chief engineer.

The past year has been one of unusual activity in the Paving Division, and the amount of work accomplished has resulted in a material improvement in the condition and appearance of the streets throughout the entire City. Owing to the uncertainty attending the outcome of the legislation relating to the tax limit, and the consequent delay in the appropriations, little new construction was begun until late in the season; notwithstanding this fact, however, a large number of streets have been constructed in the outlying districts,

and material progress has been made in the reconstruction of streets in the business section of the City. The condition of the down-town streets, so called, has been a constant source of complaint for years ; the pavement of many of these streets has been laid for from twenty to thirty years, and the constant wear and tear of heavy teaming, together with the digging up of the pavement by corporations occupying the streets has rendered their condition worse from year to year, until at the present time many of the streets are entirely unfit for the travel to which they are subjected.

RECONSTRUCTION.

The business interests of the City demand that proper facilities be provided for the transportation of goods, and the immense amount of teaming required for this purpose renders it imperative that the streets be paved with a permanent pavement laid in the most substantial manner. A comprehensive scheme for the renovation of the streets in the business section of the City has been inaugurated, the beneficial effects of which are already apparent in the improved facilities for teaming and travel on the streets reconstructed in the past year. Atlantic avenue and Commercial street furnish notable examples of both the old and new conditions. These streets, which together form a broad avenue covering the entire water front of the lower end of the City, and which are almost wholly given up to heavy teaming, have been a constant source of complaint on account of the deplorable condition of the road-bed and pavement, which rendered teaming both difficult and dangerous. To remedy these conditions and provide a pavement which would meet the requirements of the heavy traffic to which these streets are subjected, provision was made for repaving these streets with large granite blocks with cement grout joints laid on a concrete base.

Contracts have been let covering the entire water front on these streets, and a large portion of the work has already been completed. The work will be resumed and finished the coming season, and the streets when completed will furnish an avenue for heavy teaming without an equal. The following-named streets have also been reconstructed in a substantial manner as stated, viz., Devonshire street, from State street to Water street, and Oliver street, from Milk street to Atlantic avenue, were repaved with large granite blocks laid on a six-inch concrete base with pitch and pebble joints ; Prince, Court, and Bosworth streets were repaved with

granite blocks with pitch and pebble joints on a gravel base; and Boylston street, from Washington street to Tremont street, repaved with granite blocks on a gravel bed. The repaving of Summer street, from Washington street to Federal street, has also been completed with large granite blocks laid on a six-inch concrete base with cement grout joints.

ASPHALT PAVEMENT.

There has been an increased demand for asphalt pavements on the part of the public, particularly in the residential districts and in the sections of the City occupied by business offices, on account of the noiseless character of the pavement and its cleanly appearance.

In compliance with this demand, asphalt pavements have been laid in the following streets, viz.: Tremont street, from Scollay square to Boylston street; Beacon street, from Arlington street to Clarendon street; Boylston street, from Arlington street to Berkeley street; Temple place; Mason street; Trinity place, from Stuart street to Stanhope street; and Prince street, between Hanover street and Salem street, in the City Proper, and in Meridian street, from Trenton street to Eutaw street, in East Boston. The asphalt in all of these streets was laid under a 10-year guarantee.

A portion of Tremont street was paved with a new style of wooden block laid on a 6-inch concrete base as an experiment for the purpose of determining the comparative durability of this form of pavement. The blocks used were furnished and laid by the United States Wood Preserving Company. These blocks have been treated by a new process which, it is claimed, renders them impervious to moisture and more durable than the old style of wooden block. This portion of the work was also laid under a 10-year guarantee, and the practical result of the experiment is awaited with a great deal of interest. The widening of the sidewalks on this street now meets with universal approval on account of additional accommodation for foot travel and the improvement in the appearance of the street.

ASSESSMENT STREETS.

Under the provisions of Chapter 323 of the Acts of 1891, and Acts in amendment thereof or in addition thereto, thirty-two new streets and two public alleys have been constructed and sixteen streets partially constructed. Work on the widening and construction of Cambridge street, Ward 25, from Brighton avenue to Washington street, which was

begun and suspended under the last administration, has been resumed, and the work will be completed the coming season. The work of widening Tremont street, Ward 25, from Washington street to the Newton line, a much-needed improvement, has also been begun, and good progress made thereon. The work is now suspended, but will be resumed and finished in the spring. The construction of the "323" streets, so called, and all new street construction, is now under the direct supervision of the Paving Division. The large amount of engineering incidental to street construction requires the constant employment of a large force of engineers, who have heretofore been detailed from another Department. These men, although paid by the Street Department, were still under the control of the Department to which they belonged.

Experience has demonstrated that to secure the best results this force should be under the direct control of and answerable to the Superintendent of Streets alone. This has been accomplished by the creation of an engineering corps of the Paving Division, corresponding to the engineering corps of the Sewer Division, to take charge of the details of construction, prepare plans, and to consider and report on all matters requiring the services of an engineer.

GENERAL WORK.

The regular force of the Division has been constantly employed during the year in improving the general condition of the streets throughout the City.

About forty-two (42) miles of macadam streets, with an area of 551,869 square yards, have been resurfaced.

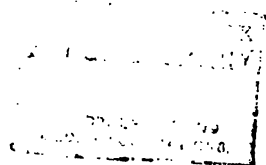
Two hundred and sixty-five thousand linear feet of edge-stones have been set or reset, 222,000 square yards of paving relaid, and about 145,000 square yards of brick sidewalks laid outside of the work done under contract for street construction. Many of the macadam streets in the outlying sections of the City are in a disgraceful condition, and the condition of many of the paved streets affords just ground for complaint.

The work of the past year has resulted in a marked improvement in the appearance of the streets, but much still remains to be done to make their condition satisfactory.

Extensive repairs have also been made on the asphalt streets throughout the City, under the supervision of this Division, and their condition has been materially improved. The condition of some of the older pavements on which the



CRUSHER, IFFLEY ROAD.



guarantee has expired is such that it would be economy in many cases to resurface the entire street as the expense of patching increases with each successive year, and no amount of patching will put or keep the pavement in proper condition.

A large portion of the road-bed of Commonwealth avenue, in Ward 25, has been entirely reconstructed, and the construction of the avenue is now complete, with the exception of a portion of the loam space.

The bridge over Columbia road, at Richfield street, Ward 20, is now in process of construction, under an agreement between the City of Boston and the New York, New Haven & Hartford Railroad Company. The completion of this bridge will do away with the awkward and dangerous condition heretofore existing at this point, and will enable the City to complete the construction of Columbia road, and make suitable connections with the intersecting streets.

The abandonment of the Park Square Station as a railroad terminal has opened the way for a change in the construction of Berkeley street, between Boylston street and Columbus avenue, which will be of material benefit to the public. Advantage has been taken of the opportunity afforded to revise the grade of the street and do away with the bridge over the railroad. Plans have been made, and a contract let for removing the bridge and filling the street over the railroad location. By the revised grade the present rise in the street will be removed, and a practically level grade established for the street, which will give better facilities for travel.

CRUSHING PLANT.

Important and much-needed changes in and additions to the crushing plant of the Department have been made during the year. A new crusher, with an output of 300 tons per day, has been erected between Iffley road and Montebello road, in the West Roxbury District. This crusher is fitted with all the modern appliances and is built in the most thorough and substantial manner; it is conceded to be one of the finest in the country. The crusher formerly standing on the Bleiler ledge, in the Roxbury District, has been removed to the Kenney ledge and thoroughly overhauled and repaired.

Extensive repairs have also been made on the other crushers belonging to the Department, and the entire crushing plant is now in first-class working order. The crusher at Rosseter street, in the Dorchester District, will serve its

purpose in its present location through the winter, but its condition is such that its removal to another location would not be feasible.

YARD AND WHARF ROOM.

The facilities for receipt and storage of material for construction, and for the proper care of the stock and property of the City, have been entirely inadequate to the needs of the Department. Much has been done during the year to meet the wants of the Department in this respect, and as a result the conditions have been materially improved.

By the conversion of the old swill wharf and buildings on Albany street to this Division, additional and much-needed room for the receipt and storage of construction material for use in the City Proper has been secured.

Additional wharf and yard room in the North End district has also been secured by the lease of the adjoining premises, which, with the contemplated change in and addition to the present buildings will provide ample room for the receipt and storage of the stock and property of the City in this section.

In the East Boston district a model yard for the use of the several Divisions of the Street Department has been provided by the lease of a portion of the property of the Glendon Company. Stables, sheds, and an office building have been erected and ample facilities provided for the proper care of the stock and property of the several Divisions.

The excellent wharf privileges connected with this yard and ease of access render it a most desirable acquisition to the Department.

STEAM ROLLERS AND TOOLS.

The steam rollers belonging in the Department (six in number) have been thoroughly overhauled and repaired at a considerable expense, and, with a slight outlay for minor repairs, will be in good shape for the coming season.

The stock of tools belonging to the Division has been thoroughly gone over and repairs and additions made to the same. The wagons and other appliances in use have also been repaired, and everything put in good condition for use.

ASSESSMENT STREETS.

The following streets were constructed under Chapter 323, of the Acts of 1891, and the Acts in amendment thereof, or in addition thereto :

Ashley street, from Breed street to Walley street, is about 650 feet long. The contract for constructing the surface of this street was awarded to Philip Doherty, September 21, 1900. Work under this contract was begun October 1, 1900, and suspended December 17, 1900.

Barry street, between Hamilton street and Quincy street, "ledge excavation." The contract for excavating the ledge on this street was awarded to the F. E. McCarthy Company, June 6, 1900, and was completed October 1, 1900. Amount of excavation, 2,812 cubic yards.

Callender street, from Tucker street across Don street, is about 2,229 feet long. The contract for constructing the surface of this street was awarded to John F. Cullen November 13, 1899. Work was begun on this contract March 29, 1900, and suspended April 27, 1900; resumed August 21, 1900, and completed November 21, 1900. It is a 6-inch macadam roadway, with crushed stone sidewalks. The crushed stone, gutter blocks, and edgestones were furnished by the City, and hauled by the contractor to the site of the work. The flagging for the crosswalks was furnished by the contractor.

Cambridge street, Brighton avenue to Washington street, is about 3,642 feet long. The contract for constructing the surface of this street was awarded to J. L. Bryne & Co. Work under this contract was begun October 26, 1899, and suspended December 23, 1899. The work was subsequently abandoned by the contractors, who surrendered their contract. The contract for finishing the street was awarded to J. H. Sullivan, October 30, 1900. Work was begun under this contract November 6, 1900, and is still in progress.

Cardington street, from Cobden street across Fenner street, is about 226 feet long. The contract for constructing the surface of this street was awarded to Philip Doherty, August 29, 1900. Work was begun September 5, 1900, and suspended October 15, 1900.

Corinth street, between Washington street and Brandon street, is about 614 feet long. The contract for constructing the street was awarded to Collins & Ham, October 19, 1900. The work of removing the buildings within the line of widening was begun October 26, 1900, and is still in progress. No work has been done on the street.

Dunford street, between Cobden street and Fenner street, is about 198 feet long. The contract for constructing the surface of this street was awarded to James Doherty, August 2, 1900. Work under this contract was begun August 13, 1900, and completed September 10, 1900. It is a 6-inch macadam roadway with brick sidewalks. The crushed stone, gutter blocks, and edgestones were furnished by the City and hauled by the contractor to the site of the work. Brick for the sidewalks was delivered on the line of the work by the City. Flagging for the crosswalks was furnished by the contractor.

Echo street, from Columbus avenue to Centre street, is about 175 feet long. The contract for constructing the surface of this street was awarded to James Doherty, August 2, 1900. Work under this contract was begun August 13, 1900, and completed September 10, 1900. It is a 6-inch macadam roadway with brick sidewalks. The crushed stone, gutter blocks, and edgestones were furnished by the City and hauled by the contractor to the site of the work. Bricks for the sidewalks were delivered by the City on the line of the work. Flagging for crosswalks was furnished by the contractor.

Fowler street, between Glenway street and McLellan street, is about 353 feet long. The contract for constructing the surface of this street was awarded to Booth & Co., August 2, 1900. Work under this contract was begun August 30, 1900, and completed October 15, 1900. It is a 6-inch macadam roadway with crushed stone sidewalks. Crushed stone, gutter blocks and edgestones were furnished by the City and hauled by the contractor to the site of the work. Flagging for crosswalks was furnished by the contractor.

Homes avenue, from Bowdoin street to Topliff street, is about 880 feet long. The contract for constructing the surface of this street was awarded to Thomas F. Welch, August 2, 1900. Work was begun on this contract August 9, 1900, and completed October 12, 1900. It is a 6-inch macadam roadway with crushed stone sidewalks, with the exception of portion between Bowdoin street and Geneva avenue, where the sidewalks were laid with artificial stone $4\frac{1}{2}$ feet wide, with a loam space 2 feet wide inside of the edgestones. The crushed stone, gutter blocks and edgestones were furnished by the City and hauled by the contractor to the site of the work. Flagging for the crosswalks was furnished by the contractor.

Lauriat avenue, Ballou avenue to Norfolk street, is about 769 feet long. Artificial stone sidewalks. The contract for laying artificial stone sidewalks on this street was awarded to W. A. Murtfeldt Company, September 21, 1900, and the work completed December 6, 1900.

Montague street, between Ashmont street and Roslin street, is about 345 feet long. The contract for constructing the surface of this street was awarded to Collins & Ham, August 28, 1900. Work was begun under this contract September 4, 1900, and completed October 12, 1900. It is a 6-inch macadam roadway. Crushed stone and edgestones were furnished by the City, and were hauled by the contractors to the site of the work. The gutter blocks were furnished by the City on the line of work. Flagging for crosswalks was furnished by the contractors.

Montague street, between Ashmont street and Roslin street. Artificial stone sidewalks, about 345 feet long. The contract for laying the sidewalks was awarded to Simpson Brothers Corporation, October 15, 1900, and the work was completed November 14, 1900.

Nottingham street, between Bullard street and Bowdoin avenue, is 626 feet long. The contract for constructing the surface of this street was awarded August 2, 1900, to D. F. O'Connell. Work was begun under this contract September 4, 1900, and completed October 27, 1900. It is a 6-inch macadam roadway. Crushed stone, gutter blocks and edgestones were furnished by the City, and hauled by the contractor to the line of the work. Flagging for crosswalks was furnished by the contractor.

Nottingham street, between Bullard street and Bowdoin avenue. Artificial stone sidewalks, about 626 feet long. The contract for laying the walks was awarded to W. A. Murtfeldt Company, October 5, 1900. The work was suspended December 8, 1900.

Public Alley 432, between Commonwealth avenue and Newbury street, from Fairfield street to Gloucester street, is about 520 feet long. The contract for constructing the surface of this street was awarded to E. S. Fogerty, October 24, 1900. Work was begun under this contract November 8, 1900, and completed November 24, 1900. This alley is paved with blocks on a gravel base, with Portland cement grout joints, and brick sidewalks. The granite blocks for the roadway and the bricks for the sidewalks were delivered on the line of the work by the City. The excavating was done by the contractor.

Public Alley 439, between Boylston street and Newbury street, from Clarendon street to Dartmouth street, is about 575 feet long. The contract for constructing the surface of this street was awarded to E. S. Fogerty, November 12, 1900. Work under this contract was begun November 16, 1900, and completed December 7, 1900. The roadway is paved with vitrified brick, and the sidewalks with paving brick. The bricks for the roadway and sidewalks were delivered on the line of the work by the City. The excavating was done by the contractor.

Rockford street, between Dudley street and Clifton street, is about 605 feet long. The contract for constructing the surface of this street was awarded to D. F. O'Connell, August 2, 1900. The work under this contract was begun September 24, 1900, and completed December 8, 1900. It is a 6-inch macadam roadway with brick sidewalks. Crushed stone, gutter blocks and edgestones were furnished by the City and hauled by the contractor to the line of the work. Flagging for crosswalks was furnished by the contractor.

Seaborn street, between Centre street and Kenwood street, is about 438 feet long. The contract for constructing the surface of this street was awarded to James Doherty, August 28, 1900. Work under this contract was begun September 7, 1900, and completed October 12, 1900. It is a 6-inch macadam roadway, with crushed stone sidewalks. Crushed stone and edgestones were furnished by the City, and hauled by the contractor to the site of the work. The gutter blocks were furnished by the City on the line of the work. Flagging for the crosswalks was furnished by the contractor.

Stratford street, between Anawan and Clement avenues, is about 975 feet long. The contract for constructing the surface of this street was awarded to Philip Doherty, November 23, 1900. Work under this contract was begun December 3, 1900, and suspended January 14, 1901.

Stratford street, between Anawan and Clement avenues, is 975 feet long. Artificial stone sidewalks. The contract for laying these sidewalks was awarded to William L. Cahalan, June 21, 1900. Work was begun under this contract September 12, 1900, and suspended November 13, 1900.

Tremont street, between Washington street and the Newton line, is about 1,827 feet long. The contract for constructing the surface of this street was awarded to William Scollans, November 6, 1900. Work was begun under this contract November 12, 1900; and suspended January 12, 1901.

Trinity place, between Stuart and Stanhope streets. The contract for constructing sidewalks, fences, and sub-grading the street was awarded to Frank Bachelder, November 2, 1900. Work was begun November 12, 1900, and completed December 5, 1900.

Trinity place, between Stuart and Stanhope streets, is about 262 feet long. The contract for constructing the surface of this street was awarded to the Barber Asphalt Paving Company, September 29, 1900. Work under this contract was begun November 17, 1900, and completed December 1, 1900. The street is paved with Trinidad Lake asphalt, with a wearing surface one and one-half ($1\frac{1}{2}$) inches thick, laid on a one and one-half ($1\frac{1}{2}$) inch asphaltic cement concrete binder on a six (6) inch American cement concrete base; under a ten year guarantee.

Woodcliff street, from Howard avenue easterly, is about 275 feet long. The contract for constructing the surface of this street was awarded to Philip Doherty, August 2, 1900. Work was begun under this contract August 7, 1900, and completed October 5, 1900. It is a six (6) inch macadam roadway, with crushed stone sidewalks. Crushed stone, gutter blocks and edge-stones were furnished by the City, and hauled by the contractor to the site of the work. Flagging for the crosswalks was furnished by the contractor.

Province court, from Province street about 165 feet easterly, was laid with granite blocks on a gravel base with pitch and pebble joints. The paving and regulating was done under contract by Jones & Meehan. The old pavement was removed by the contractor. Former pavement, old blocks on gravel base.

Washington street, from Morton street to Tower street, is about 550 feet long. The contract for constructing the surface of this street was awarded to Jones & Meehan, October 17, 1900. Work was begun under this contract November 20, 1900, and suspended December 15, 1900.

PAVING.

Granite block pavement on a concrete base; laid with pitch and pebble joints, 6,138 square yards.

Granite block pavement on a gravel base; laid with pitch and pebble joints, 1,079 square yards.

Granite block pavement on a concrete base; laid with Portland cement grout joints, 22,996 square yards.

Granite block pavement on gravel base; laid with gravel joints, 4,312 square yards.

Granite block pavement, on a gravel base, laid with Portland cement grout joints, 453 square yards.

Vitrified brick pavement, on a gravel base, laid with Portland cement joints, 299 square yards.

Wood block paving, on concrete base, laid with gravel joints, 1,367 square yards.

Trinidad lake asphalt, with a binder course of asphaltic cement concrete, laid on American Portland cement concrete base, under a ten year guarantee, 11,483 square yards, at \$3.25 per square yard, exclusive of the cost of preparing the road-bed for the concrete base; 10,562 square yards were laid in Tremont street, Boylston street to Scollay square, and 757 square yards were laid in Trinity place.

Trinidad land asphalt, with a binder course of asphaltic cement concrete, laid on American cement concrete base, under a ten year guarantee, 1,495 square yards were laid in Temple place, at a cost of \$3.05 per square yard, exclusive of the cost of preparing the road-bed for the concrete base.

Sicilian rock asphalt, on an American cement concrete base 11,520 square yards—3,844 square yards in Boylston street, Arlingtons treet to Berkeley street, at a cost of \$3.25 per square yard; 6,681 square yards in Beacon street, Arlington street to Clarendon street, at a cost of \$3.25 per square yard; Priuce street, towards Hanover street, 464 square yards, at a cost of \$3.25 per square yard; Meridian street, between Trenton and Eutaw streets, 540 square yards, at a cost of \$3.25 per square yard, exclusive of the cost of preparing the road-bed. All asphalt pavement laid during the season of 1900 was laid with a maintenance guarantee for ten (10) years.

Atlantic avenue, from Oliver street across India square, was paved with large blocks on a six (6) inch American cement concrete base, with Portland cement grout joints. Within the tracks of the Boston Elevated Railway Company and the Union Freight Company, Philadelphia size blocks were used on the concrete base, with grout joints. The old pavement was removed and the roadway excavated by the Street Department. The paving and regulating was done under contract by Jones & Meehan. The Boston Elevated Railway Company and Union Freight Railroad Company, by agreement, paid for the portion between their tracks. Former pavement, granite blocks, with gravel joints on gravel base.

Atlantic avenue, from India square to Eastern avenue. In this portion of Atlantic avenue the roadway was widened on the west side, by reducing the width of the sidewalk two (2) feet.

The work within these limits was only partially completed. The west roadway was paved with large blocks on a six (6) inch American cement concrete base, with Portland cement grout joints. The old pavement was removed and the roadway excavated by the Street Department. The old three (3) feet corners have been taken up and replaced by circular edgestones, cut on longer radii. This section of the avenue will be completed early this coming season. Former pavement, granite blocks with gravel joints on gravel base.

Commercial street, west side, from Hull street to Hanover street, was paved with large blocks on a six (6) inch American cement concrete base, with Portland cement grout joints. The east side will be completed early this coming season. The old pavement was removed and the roadway excavated by the contractors, A. A. Libby & Co. Former pavement, granite blocks on gravel base, with gravel joints.

Boylston street, from easterly side of Arlington street, to Berkeley street, was paved with two (2) inches of Sicilian rock asphalt, on a six (6) inch American cement concrete base, by the Boston Asphalt Company. The old pavement was removed and the roadway excavated by the Street Department. Former pavement was macadam.

Beacon street, between Arlington street and Clarendon street was paved with two (2) inches of Sicilian rock asphalt, on a six (6) inch American cement concrete base, by the Boston Asphalt Company. The old pavement was removed and the roadway excavated by the Street Department. The edgestones were reset and the brick sidewalks relaid by H. Gore & Co. Former pavement, macadam.

Hayward place, from Washington street to Harrison avenue, was paved in November, 1898, with two and one-half ($2\frac{1}{2}$) inches of asphaltina (a patented coal-tar production), on a six (6) inch American Portland cement concrete base, by the Boston Paving Company, under a five-year guarantee. This street was resurfaced in October, 1900, with Trinidad land asphalt.

Mason street, from Tremont street, about ninety-five feet easterly, was paved with one and one-half ($1\frac{1}{2}$) inches of Trinidad Lake asphalt wearing surface, with one and one-half ($1\frac{1}{2}$) inches of asphaltic cement concrete binder on a six (6) inch American Portland cement concrete base, by the Barber Asphalt Paving Company. The old pavement was removed and the roadway excavated for the concrete base by the Street Department. Former pavement, old blocks on gravel bed.

Meridian street, from Trenton street to Eutaw street, was paved with two (2) inches of Sicilian rock asphalt on a six (6) inch American cement concrete base, except the portion occupied by the Boston Elevated Railway Company. The brows for eighteen (18) inches outside the tracks were paved with granite blocks on a concrete base, with pitch and pebble joints. The work was done under contract by Jones & Meehan. The edge-

stones were reset and brick sidewalks relaid by the contractors. The old pavement was removed and the roadway excavated by the Street Department. Former pavement, macadam.

Oliver street, from Atlantic avenue to Milk street, was paved with granite blocks on six (6) inch American cement concrete base, with pitch and pebble joints. The paving and regulating was done under contract by James Doherty. The old pavement was removed, and the roadway excavated by the contractor. Former pavement, old blocks on gravel base with gravel joints.

Summer street, from Washington street to Federal street, was paved on the south side with large granite blocks on a six (6) inch American cement concrete base, with Portland cement grout points. Within the tracks of the Boston Elevated Railway Company, Philadelphia size blocks were used on a concrete base, with grout joints. The paving and regulating was done under contract by Joseph B. O'Rourke. The old pavement was removed, and the roadway excavated by the contractor. Former pavement, granite blocks on a gravel base.

Tremont street, from Boylston street to Scollay square, was paved with asphalt, by the Barber Asphalt Paving Company, except the west half of the street between Temple place and Park street, which was paved with wooden blocks. The portion paved with asphalt has a wearing surface of one and one-half ($1\frac{1}{2}$) inches Trinidad Lake asphalt with one and one-half ($1\frac{1}{2}$) inches Asphaltic cement concrete binder on an American Portland cement concrete base, with a ten-year guarantee. The west half of the roadway, from Temple place to Park street, was paved with wooden blocks and gravel joints on a concrete base, by the United States Wood Preserving Company, and the paving guaranteed for ten years. The old pavement was removed, and the roadway excavated by the Street Department. Former pavement, old blocks on gravel base.

Tremont street, between Mason street and School street, "Sidewalks." The sidewalks were widened on the east side, attaining their greatest width of twenty-five (25) feet at West street. The widened portion of this sidewalk was laid with brick or artificial stone. The artificial stone was laid by Simpson Brothers Corporation, and the brick by Frank Bachelder.

Centre street, retaining wall and fence. The contract for constructing the retaining wall and fence on the east side of Centre street, opposite New Heath street, Roxbury, was awarded to P. F. Donovan, July 7, 1900. Work under this contract was begun July 17, 1900, and completed November 3, 1900. It is a first-class seam-face, rubble wall built of large-sized Roxbury stone laid solid in cement mortar, and surmounted by a wooden fence. The rock excavation and work necessary in preparing for the foundation of the wall was done by the contractor and included in the contract price.

Freeport street, retaining wall. The contract for con-

structing the retaining wall along Freeport street at the Dorchester Yacht Club, was awarded to Collins & Ham, September 15, 1900. Work under this contract was begun September 17, 1900, and completed December 26, 1900. It is a first-class rubble wall, built of Quincy granite laid solid in cement mortar. All excavation and work necessary in preparing for the foundation was done by the contractors, and the cost of same included in the contract price.

Respectfully yours,

D. N. PAYSON,

Deputy Superintendent.

FINANCIAL STATEMENT.

REGULAR APPROPRIATION.

Maintenance	\$780,000 00	
Amount collected for repairs made by Paving Division and inspector's services for dif- ferent companies, etc.	2,700 72	\$782,700 72
Expenditures from February 1, 1900, to January 31, 1901		<u>\$782,700 72</u>

SPECIAL APPROPRIATIONS, PAVING AND STREET IMPROVEMENTS.

Amount of balances February 1, 1900	\$34,786 92	
Amount of appropriations, 1900- 1901, revenues and transfers	1,037,535 22	\$1,072,322 14
Amount of expenditures		710,802 50
Balances unexpended		<u>\$361,519 64</u>

TOTAL EXPENDITURES.

Maintenance appropriation	\$782,700 72
Special appropriations	710,802 50
Laying-Out and Construction of Highways	83,419 21
Laying-Out and Construction of Highways, East Boston	62,934 32
Laying-Out and Construction of Highways, Brighton	11,800 23
Laying-Out and Construction of Highways, Dor- chester	112,872 71
<i>Carried forward</i>	<u>\$1,764,529 69</u>

STREET DEPARTMENT — PAVING DIVISION. 67

<i>Brought forward</i>	\$1,764,529 69
Laying-Out and Construction of Highways, Rox-	
bury and West Roxbury	70,337 07
Blue Hill and other avenues	58,677 26
South Union Station	28,556 98
Charlestown bridge	3,806 74
Charlestown street	1,078 10
Abolishment of grade crossings	416 00
Buildings, Chelsea street	9,048 34
Malden bridge	1,881 65
	<u>\$1,938,331 83</u>

INCOME.

Statement showing the amount of bills deposited with the City Collector from February 1, 1900, on account of the Paving Division.

Edgestone and sidewalk assessments	<u>\$3,011 00</u>
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The amount paid into the City Treasury during the year on account of the Paving Division is as follows :

Sidewalk construction assessments (law of 1892),	\$6,201 61
Edgestone and sidewalk assessments (law of 1893)	199 84
	<u>\$6,401 45</u>

Objects of Expenditures from the Regular Appropriation, Classified by Districts, from Feb. 1, 1900, to Jan. 31, 1901.

DISTRICTS.	Repairs.	Snow.	Edgestone and Sidewalk Repairs.	Repairing Fences.	Repairing Plankwalks.	A. Miscellaneous.	B. In excess of Special Appropriation.	C. New Work, Paid from Maintenance.	Totals.
1. South Boston.....	\$7,864 92	\$2,488 00	\$9,332 46	\$580 14	\$909 90	.....	.....	.....	\$21,175 42
2. East Boston.....	9,318 51	1,775 40	6,700 09	1,233 89	415 98	.....	.....	.....	19,443 87
3. Charlestown.....	21,675 80	2,563 00	6,286 38	37 50	59 27	.....	.....	.....	30,623 95
4. Brighton.....	14,410 24	1,689 88	460 18	67 65	603 24	.....	\$1,170 29	.....	18,401 43
5. West Roxbury.....	32,913 71	1,870 08	7,770 88	2,237 96	632 92	.....	7,830 18	.....	52,755 73
6. Dorchester.....	45,051 00	2,355 54	8,996 39	542 50	4,122 06	.....	13,702 37	.....	74,768 88
7. Roxbury.....	60,585 09	1,725 95	16,731 10	1,768 91	2,524 55	.....	26,848 22	.....	110,243 82
8. South End.....	16,835 40	5,838 63	7,983 82	202 38	2,517 32	.....	15,246 52	.....	48,679 07
9. Back Bay.....	22,069 97	1,913 19	6,496 02	332 41	1,287 90	.....	7,086 69	.....	39,206 18
10. North End.....	22,410 09	6,863 76	7,305 56	2 56	167 26	.....	3,633 61	\$5,859 78	46,262 64
						\$321,138 73	.....	.....	331,188 73
Totals	\$233,154 73	\$28,186 38	\$78,124 90	\$7,006 90	\$13,240 42	\$321,138 73	\$75,037 88	\$5,859 78	\$782,700 73

SCHEDULE A.

Salaries of Deputy Superintendent and office employees	\$15,597 27
Salaries of Permit Office employees	10,259 90
Salaries of Inspectors	7,729 53
Salaries of Engineers	9,194 73
Smoke inspection	3,135 52
Holidays	28,306 19
Signs and numbers	6,958 96
Furniture	59 00
Repairs to offices, stables, sheds, etc.	3,445 15
Printing and stationery	6,291 39
Gas	379 37
Messenger service	66 07
Wharfage and rent	11,330 54
Medical attendance on injured employees	147 01
Fuel and oil	2,370 99
Taxes	1,230 69
Advertising	378 20
Sundries	868 75
Expenses of yards and stables, including repairs to carts, harnesses and stables, and care of horses, etc.	\$164,519 94
Less amount earned by Division teams	79,804 75
	<hr/>
	84,715 19
Veterinary services	1,565 48
Telephones	2,174 27
Artificial stone sidewalks	6,195 59
Street cleaning, suburban districts	34,328 58
Edgestones and sidewalks, new	14,784 47
Building new fences, etc.	948 89
Crossing repairs	9,203 45
Crossings (new)	5,582 45
Executions of court	2,695 95
Subway, Traverse street	1,412 12
Mosman crusher, construction	16,761 75
Engineering supplies	2,651 56
Kenney crusher, construction	10,779 60
Inspectors' badges	55 50
Boiler insurance	150 00
Stock	11,245 03
Stone crushers	11,405 36
	<hr/>
	\$324,404 50
Less amount earned by steam rollers	3,265 77
	<hr/>
	<u>\$321,138 73</u>

SCHEDULE B.

The following schedule shows the expenditure from the maintenance appropriation of this Division, in excess of special appropriations :

Street Improvements, Ward 10 :	
Norway street	\$464 35
Street Improvements, Ward 11 :	
Irving street	1,357 95
Pinckney street	2,295 66
Street Improvements, Ward 12 :	
Montgomery street	1,622 80
Street Improvements, Ward 16 :	
Massachusetts avenue, Edward Everett square to railroad	11,887 75
Quincy street	1,814 62
Street Improvements, Ward 17 :	
Massachusetts avenue, Railroad to Swett street, Swett street	6,685 34
	6,938 38
Street Improvements, Ward 18 :	
Greenwich street	814 54
Ruggles street	1,589 49
Shawmut avenue	1,599 15
Warwick street	3,063 52
Westminster street	2,298 03
Windsor street	1,866 97
Street Improvements, Ward 19 :	
Calumet street	8,897 27
Huntington avenue	6,622 34
Parker Hill avenue	2,770 54
Street Improvements, Ward 21 :	
Clifford street	1,489 35
Otisfield street	1,195 28
Wabon street	906 28
Washington street	357 80
Street Improvements, Ward 23 :	
Park street	2,722 87
Temple street	3,313 02
Washington street	1,294 29
Street Improvements, Ward 25 :	
Dustin street	371 87
Everett street	479 70
Parsons street	318 72
	<hr/>
	\$75,037 88

SCHEDULE C.

NEW WORK.—PAID FROM MAINTENANCE.

Myrtle street, Revere to Joy street, resurfaced and regulated.

Labor, teaming, and materials furnished by the	
City	\$1,526 29
Amount paid to Dennis Kiley, paving	681 50
Amount paid to Frank Bachelder, paving	315 90
	<hr/>
	\$2,523 69
	<hr/>

Park street, Beacon to Tremont street, sidewalk removed on one side and widened on the other.*

Labor, teaming, and materials furnished by the	
City	\$237 60
Amount paid to W. H. Glenn & Co., paving	3,098 49
	<hr/>
	\$3,396 09
	<hr/>

*DETAIL OF EXPENDITURES UNDER SPECIAL APPROPRIATIONS.***Atlantic avenue**, Oliver to Commercial street, repaved with large granite blocks on a concrete base with cement grout joints, and regulated (unfinished).

Labor, teaming, and materials furnished by the	
City	\$43,337 33
Amount paid to Jones & Meehan, paving	15,064 41
Amount paid to Dennis Kiley, paving	7,640 10
Amount paid to D. F. O'Connell, paving	1,378 54
	<hr/>
	\$67,420 38
	<hr/>

Beacon street, Arlington to Dartmouth street, asphalted and regulated (unfinished).

Labor, teaming, and materials furnished by the	
City	\$9,848 79
Amount paid to H. Gore & Co., paving	660 05
Amount paid to Boston Asphalt Company, asphalt- ing	18,453 50
	<hr/>
	\$28,962 34
	<hr/>

* Unfinished from 1899.

Boylston street, Arlington to Berkeley street, asphalted and regulated.

Labor, teaming and materials furnished by the City,	\$3,933 62
Amount paid to Boston Asphalt Company, asphalt-	
ing	10,221 25
	<u>\$14,154 87</u>

Buildings, Chelsea street.

Labor, teaming and materials, furnished by the	
City, erecting new buildings on Glendon Wharf,	
East Eagle street	\$9,048 34

Charles street, Fruit across Allen street, asphalted.

Amount retained from Barber Asphalt Paving	
Company for work done in 1899, under contract,	\$318 80

Commercial street, Fleet to Clinton street (work not stated).

Labor	\$92 38
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Commercial street, Prince street across Eastern avenue, repaved with large granite blocks on a concrete base with cement grout joints and regulated (unfinished).

Labor, teaming and materials furnished by the City,	\$18,893 21
Amount paid to A. A. Libby & Co., paving	9,882 99
	<u>\$28,776 20</u>

Commonwealth avenue.

Amount paid by Executions of Court for labor	
claims against the Boston Contracting Company,	\$3,823 72
Labor	281 82
	<u>\$4,105 54</u>

Congress street, Atlantic avenue to the bridge.

Labor	\$40 64
Amount retained from Jones and Meehan, for	
work done in 1899, under contract	233 08
	<u>\$273 72</u>

Devonshire street, Water to State street, repaved with large granite blocks on a concrete base with pitch joints, and regulated.

Labor, teaming and materials furnished by the City,	\$4,817 85
Amount paid to Joseph B. O'Rourke, paving	2,121 53

Carried forward \$6,939 38

STREET DEPARTMENT — PAVING DIVISION. 73

<i>Brought forward</i>	\$6,939 38
Amount of appropriation for Devonshire street	\$6,500 00
Amount paid out of appropriation for Street Improvements, Ward 6	439 38
	<u>\$6,939 38</u>

Freeport street, Ward 24, retaining wall (unfinished).

Labor, teaming and materials furnished by the City,	\$834 77
Amount paid to Collins & Ham, building retaining wall	3,388 95
	<u>\$4,223 72</u>

Harrison avenue, Asylum to Davis street, asphaltting (work not started).

Advertising	\$6 66
Labor	5 50
	<u>\$12 16</u>

Neponset avenue, Adams to Minot street (work not started).

Labor	\$366 99
Advertising	5 00
	<u>\$371 99</u>

Oliver street, Atlantic avenue to Milk street, repaved with large granite blocks on a concrete base, with pitch joints, and regulated.

Labor, teaming and materials furnished by the City,	\$9,979 96
Amount paid to James Doherty, paving	13,220 04
	<u>\$23,200 00</u>
Amount of appropriation for Oliver street, Atlantic avenue to Milk street	<u>\$23,200 00</u>

Retaining wall, Marcella and Centre streets.

Labor, teaming and materials furnished by the City,	\$367 38
Amount paid to P. F. Donovan, building retaining wall	6,236 69
	<u>\$6,604 07</u>

Amount of appropriation for retaining wall, Marcella and Centre streets	\$2,492 40
Amount paid out of appropriation for Street Improvements, Ward 22	4,111 67
	<u>\$6,604 07</u>

Summer street, Washington to Federal street, repaved with large granite blocks on a concrete base with cement grout joints, and regulated.

Labor, teaming and materials furnished by the City,	\$9,631 07
Amount paid to Joseph B. O'Rourke, paving	8,220 09
	<u>\$17,851 16</u>

Talbot avenue, Blue Hill avenue to Norfolk street, unfinished work from 1899.

Labor, teaming and materials furnished by the City,	<u>\$1,093 37</u>
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Temple place, Washington to Tremont street, asphalted and regulated.

Labor, teaming and materials furnished by the City,	\$1,361 56
Amount paid to United States Paving Company, asphaltting	3,861 27
	<u>\$5,222 83</u>

Tremont street, Court to Boylston street, roadway asphalted (wooden blocks laid on concrete base on westerly side between Temple and Hamilton place, and at the intersection with School and Beacon streets), sidewalks widened and regulated.

Labor, teaming and materials furnished by the City,	\$11,593 12
Amount paid to Barber Asphalt Paving Company, asphaltting	35,107 65
Amount paid to United States Wood Preserving Company, laying wooden blocks	3,143 18
Amount paid to Simpson Brothers Corporation, artificial stone sidewalks	1,050 56
Amount paid to F. Bachelder, paving	451 60
	<u>\$51,346 11</u>

Charlestown street, Haymarket square to Causeway street, unfinished work from 1899.

Teaming and materials furnished by the City	\$233 91
Amount retained from Metropolitan Contracting Company, for work done in 1899, under contract	844 19
	<u>\$1,078 10</u>

* Five thousand nine hundred sixteen dollars and fifty-eight cents paid by Boston Elevated Railway Company.

ABOLISHMENT OF GRADE CROSSINGS.

Boston street and Dorchester avenue, labor . \$416 00

CHARLESTOWN BRIDGE.

Paving done on Commercial street, Hull to Prince street and
Causeway street, Prince to Medford street.

Labor, teaming and materials furnished by the City, \$2,792 66
Amount paid to H. Gore & Co., paving . . . 1,014 08
\$3,806 74

MALDEN BRIDGE.

Temporary roadway on Alford street.

Labor, teaming and materials furnished by the City, \$1,544 20
Amount paid to Boston Contracting Company, paving . . . 337 45
\$1,881 65

SOUTH UNION STATION.

Atlantic avenue and Dewey square, paved with large granite
blocks, on a concrete base, with pitch joints, and regulated.
(Unfinished work from 1899.)

Labor, teaming and materials furnished by the City, \$14,496 64
Amount paid to H. Gore & Co., paving . . . 14,060 34
* \$28,556 98

STREET IMPROVEMENTS, WARD 1.

Breed street, Gladstone to Leyden street, resurfaced and gut-
ters paved.

Labor, teaming and materials furnished by the City, \$201 50
Amount paid to Booth & Co., paving . . . 102 84
Amount paid to C. L. Ward, paving . . . 13 60
\$317 94

Brooks street, West Eagle to Condor street, resurfaced and
regulated.

Labor, teaming and materials furnished by the City, \$290 13
Amount paid to Booth & Co. 248 77
\$538 90

* Eighteen thousand five hundred ninety three dollars and sixty-three cents paid
by Boston Elevated Railway Company.

Chelsea street, Eagle square to Curtis street, east side, regulated.

Teaming and materials furnished by the City	\$315 50
Amount paid to Booth & Co., paving	331 88
	<u>\$647 38</u>

Eutaw street, Meridian to Marion street, and Brooks to White street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$1,283 69
Amount paid to Booth & Co., paving	931 80
	<u>\$2,215 49</u>

Lexington street, Prescott to Shelby street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$2,086 88
Amount paid to Booth & Co., paving	691 30
	<u>\$2,778 18</u>

Marion street, White to Saratoga street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$4,022 55
Amount paid to Booth & Co., paving	1,121 11
Amount paid to C. L. Ward, paving	281 51
	<u>\$5,425 17</u>

Meridian street, Trenton to Eutaw street, asphalted and regulated.

Labor, teaming and materials furnished by the City,	\$1,142 12
Amount paid to Jones & Meehan, asphaltting	1,589 63
Amount paid to Booth & Co., paving	120 23
	<u>\$2,851 98</u>

Monmouth street, Meridian to Marion street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$430 27
Amount paid to Booth & Co., paving	248 77
	<u>\$679 04</u>

Morris Street, near Putnam street, regulated.

Materials furnished by the City	\$22 25
Amount paid to Booth & Co., paving	31 99
	<u>\$54 24</u>

Princeton street, near Marion street, regulated.

Labor, teaming and materials furnished by the City,	\$220 85
Amount paid to C. L. Ward, paving	108 80
	<hr/>
	\$329 65
	<hr/>

Putnam street, White to Trenton street, near Putnam square, regulated.

Labor, teaming and materials furnished by the City,	\$248 12
Amount paid to Booth & Co., paving	207 56
Amount paid to C. L. Ward, paving	301 27
	<hr/>
	\$756 95
	<hr/>

Saratoga street, at Marion street, north side.

Labor and materials furnished by the City	\$143 40
Amount paid to C. L. Ward, paving	69 35
	<hr/>
	\$212 75
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Trenton street, Meridian to Brooks street, resurfaced and regulated; from Brooks to Prescott street, macadamized.

Labor, teaming and materials furnished by the City,	\$3,144 45
Amount paid to Booth & Co., paving	840 23
	<hr/>
	\$3,984 68
	<hr/>

White street, Putnam to Eutaw street, regulated.

Labor, teaming and materials furnished by the City,	\$106 82
Amount paid to Booth & Co., paving	106 38
	<hr/>
	\$213 20
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STREET IMPROVEMENTS, WARD 2.

Cottage street, Marginal to Maverick street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$3,143 88
Amount paid to Booth & Co., paving	1,160 39
	<hr/>
	\$4,304 27
	<hr/>

Henry street, Maverick square to Paris street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$212 23
Amount paid to C. L. Ward, paving	197 03
	<hr/>
	\$409 26
	<hr/>

Liverpool street, near Meridian street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$203 43
Amount paid to Booth & Co., paving	305 37
	<u>\$508 80</u>

Marginal street, repaired.

Labor, teaming and materials furnished by the City,	<u>\$139 60</u>
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Paris street, Putnam to Brooks and Sumner to Meridian street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$2,287 93
Amount paid to C. L. Ward, paving	667 80
Amount paid to Booth & Co., paving	145 40
	<u>\$3,101 13</u>

Ruth street, fence repaired.

Labor	<u>\$14 00</u>
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Winthrop street, Maverick square to Paris street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$140 30
Amount paid to C. L. Ward, paving	166 79
	<u>\$307 09</u>

STREET IMPROVEMENTS, WARD 3.**Ferrin street, Jackson to Edgeworth street, repaved and regulated.**

Labor, teaming and materials furnished by the City,	\$320 50
Amount paid to P. Brennan & Co., paving	88 76
	<u>\$409 26</u>

High street, Pleasant to Walker street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,199 90
Amount paid to P. Brennan & Co., paving	1,051 83
	<u>\$3,251 73</u>

Amount paid out of appropriation for Street Improvements, Ward 3	\$2,671 49
Amount paid out of appropriation for Street Improvements, Ward 5	580 24
	<u>\$3,251 73</u>

STREET DEPARTMENT — PAVING DIVISION. 79

Mt. Vernon street, entire length, resurfaced and regulated.
 Labor, teaming and materials furnished by the City, \$865 85
 Amount paid to P. Brennan & Co. 360 48

\$1,226 33

Amount paid out of appropriation for
 Street Improvements, Ward 3 \$654 58
 Amount paid out of appropriation for
 Street Improvements, Ward 5 571 75
\$1,226 33

Pearl street, Medford to Bunker Hill street, resurfaced and regulated.

Labor, teaming and materials furnished by the City, \$1,689 58
 Amount paid to Boston Contracting Company,
 paving 434 16

\$2,123 74

Stone street, edgestone set.

Labor, teaming and materials furnished by the City, \$66 33

STREET IMPROVEMENTS, WARD 4.

Allston street, Bunker Hill to Medford street, resurfaced and regulated.

Labor, teaming and materials furnished by the City, \$1,245 63
 Amount paid to P. Brennan & Co., paving 343 11

\$1,588 74

Caldwell street, Main to Perkins street, repaved and regulated.

Labor, teaming and materials furnished by the City, \$1,276 85
 Amount paid to Boston Contracting Company,
 paving 397 02

\$1,673 87

STREET IMPROVEMENTS, WARD 5.

Chelsea street, City square to Mt. Vernon street, repaved and regulated.

Labor, teaming and materials furnished by the City, \$3,326 86
 Amount paid to Boston Contracting Company,
 paving 1,140 56

Carried forward. \$4,467 42

<i>Brought forward</i>	\$4,467 42
Amount paid out of appropriation for Street Improvements, Ward 5,	\$4,272 42
Amount paid out of appropriation for Street Improvements, Ward 3	195 00
	<u>\$4,467 42</u>

Cordis street, regulated.

Amount paid to P. Brennan & Co., paving	<u>\$66 39</u>
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Gray street, resurfaced.

Labor, teaming and materials furnished by the City,	<u>\$1,131 39</u>
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Park street, Joiner street to City square (west side), repaved and regulated.

Labor, teaming and materials furnished by the City,	\$269 40
Amount paid to Boston Contracting Company, paving	113 17
	<u>\$382 57</u>

Pleasant street, Main street to Monument square, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,345 08
Amount paid to P. Brennan & Co., paving	689 21
	<u>\$2,034 29</u>

STREET IMPROVEMENTS, WARD 6.**Blackstone street, unfinished work from 1899.**

Amount retained from P. McGovern for work done in 1899, under contract	<u>\$100 79</u>
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Central street, Broad to India street, repaved and regulated (unfinished).

Labor, teaming and materials furnished by the City,	<u>\$162 94</u>
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Charter street, Commercial street to Marshall place, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$696 58
Amount paid to Dennis Kiley, paving	388 91
	<u>\$1,085 49</u>

Congress square, asphalted.

Amount paid to Barber Asphalt Paving Company, asphalting	<u>\$820 93</u>
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STREET DEPARTMENT — PAVING DIVISION. 81

Creek square, Blackstone to Union street, repaved with granite blocks on a concrete base with pitch joints, and regulated.

Labor, teaming and materials furnished by the City,	\$299 14
Amount paid to Frank Bachelder, paving	693 94
	<u>\$993 08</u>

Devonshire street, Milk to Water street.

Amount retained from Barber Asphalt Paving Company, for work done in 1899, under contract,	<u>\$157 73</u>
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Endicott street, Cooper to Thacher street.

Amount retained from Barber Asphalt Paving Company, for work done in 1899, under contract,	<u>\$180 87</u>
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Friend street, Merrimac to Washington street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$786 93
Amount paid to Dennis Kiley, paving	755 49
	<u>\$1,542 42</u>

Haverhill street, Traverse street to Haymarket square, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$739 67
Amount paid to Frank Bachelder, paving	1,251 20
	<u>\$1,990 87</u>

Merrimac street, Sudbury to Friend street, repaired.

Labor, teaming and materials furnished by the City,	\$96 37
Amount paid to Dennis Kiley, paving	211 04
	<u>\$307 41</u>

Pemberton square, repaired.

Labor	<u>\$186 50</u>
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Prince street, Salem street to 210 feet towards Hanover street, asphalted and regulated.

Labor, teaming and materials furnished by the City,	\$128 56
Amount paid to Jones & Meehan, asphaltting	1,569 67
	<u>\$1,698 23</u>

Sudbury street, Merrimac to Portland street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$466 16
Amount paid to Dennis Kiley, paving	385 32
	<u>\$851 48</u>

STREET IMPROVEMENTS, WARD 7.

Atlantic avenue, Oliver street to Dewey square, unfinished work from 1899.

Labor, teaming and materials furnished by the City,	\$138 21
Amount retained from Jones & Meehan for work done in 1899, under contract	250 69
Amount retained from P. McGovern, for work done in 1899, under contract	285 75
	<u>\$674 65</u>

Bosworth street, repaved with pitch joints and regulated.

Materials furnished by the City	\$69 66
Amount paid to F. Bachelder, paving	699 35
	<u>\$769 01</u>

Boylston street, Washington to Tremont street, repaved with pitch joints and regulated.

Teaming and materials furnished by the City,	\$19 00
Amount paid to F. Bachelder, paving	1,616 08
	<u>\$1,635 08</u>

Broadway, Washington to Curve street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$1,374 98
Amount paid to F. Bachelder, paving	1,477 22
	<u>\$2,852 20</u>

Devonshire street, near Franklin street, repaved with pitch joints.

Amount paid to F. Bachelder, paving	<u>\$622 70</u>
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Federal street, Atlantic avenue to Milk street.

Amount retained from P. McGovern for work done in 1899, under contract	<u>\$501 14</u>
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Harrison avenue, Kneeland to Bennet street.

Amount retained from Barber Asphalt Paving Company, for work done in 1899, under contract	\$166 37
Amount retained from P. McGovern, for work done in 1899, under contract	39 38
	<u>\$205 75</u>

Hawley street, Franklin to Summer street, repaved and regulated, unfinished.

Teaming and materials furnished by the City	\$68 90
Amount paid to James Doherty, paving	280 80
	<hr/>
	<u>\$349 70</u>

Hayward place.

Amount retained from Boston Paving Company, for work done in 1898, under contract	<u>\$83 42</u>
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Kingston street, Beach to Essex street.

Amount retained from Boston Asphalt Company, for work done in 1899, under contract	\$295 25
Amount retained from H. Gore & Co., for work done in 1899, under contract	106 81
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	<u>\$402 06</u>

Kneeland street, Atlantic avenue to Albany street, repaved and regulated, unfinished.

Labor, teaming and materials furnished by the City	<u>\$455 29</u>
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Mason street, from 450 feet west of West street to about 120 feet westerly.

Amount retained from Jones & Meehan, for work done in 1899, under contract	<u>\$130 66</u>
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Mason street, from Tremont street about 85 feet easterly, asphalted.

Teaming	\$50 00
Amount paid to Barber Asphalt Paving Company,	533 00
	<hr/>
	<u>\$583 00</u>

Otis street, near Winthrop square, repaved with pitch joints.

Teaming and materials furnished by the City	\$45 85
Amount paid to F. Bachelder, paving	427 50
	<hr/>
	<u>\$473 35</u>

Tremont street, Pleasant street to railroad bridge, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$1,668 01
Amount paid to F. Bachelder, paving	1,626 96
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	<u>\$3,294 97</u>

Repairing Asphalt Streets.

Amount paid to Barber Asphalt Paving Company, asphalting	<u>\$160 23</u>
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STREET IMPROVEMENTS, WARD 8.

Chambers street, Cambridge to Green street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$1,010 87
Amount paid to Dennis Kiley, paving	924 57
	<u>\$1,935 44</u>

Leverett street, Causeway street to Craigie's bridge.

Amount retained from Jones & Meehan, for work done in 1899, under contract	<u>\$106 89</u>
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Milton street, Brighton to Spring street.

Amount retained from Jones & Meehan, for work done in 1899, under contract	<u>\$49 98</u>
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Norman street, Merrimac to Green street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$1,378 58
Amount paid to Dennis Kiley, paving	450 13
	<u>\$1,828 71</u>

Pitts street, Merrimac to Green street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$1,019 81
Amount paid to Dennis Kiley, paving	603 05
	<u>\$1,622 86</u>

South Margin street, Pitts to Staniford street, repaved and regulated.

Labor, teaming, and materials furnished by the City	\$694 40
Amount paid to Dennis Kiley, paving	713 50
	<u>\$1,407 90</u>

STREET IMPROVEMENTS, WARD 9.

Compton street, Washington to Tremont street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$1,465 95
Amount paid to F. Bachelder, paving	2,246 84
	<u>\$3,712 79</u>

STREET DEPARTMENT—PAVING DIVISION.

85

Dover street, Albany street to bridge, repaved and regulated.

Labor, teaming and materials furnished by the City. \$441 39

Amount paid to F. Bachelder, paving . . . 536 12

\$977 51**Genesee and Oswego streets.**Amount retained from Jones & Meehan, for work
done in 1899, under contract\$332 21**Lehigh street**, repaved.

Labor, teaming and materials furnished by the City. \$171 35

Amount paid to F. Bachelder, paving . . . 421 62

\$592 97**Rollins street**, resurfaced and regulated.Labor, teaming and materials furnished by the
City \$962 62

Amount paid to F. Bachelder, paving . . . 174 52

\$1,137 14**Savoy street**, repaved and regulated.

Labor, teaming and materials furnished by the City. \$245 95

Amount paid to F. Bachelder, paving . . . 391 80

\$637 75**Union Park street**, Washington to Tremont street, macadamized and regulated.

Labor, teaming and materials furnished by the City. \$5,172 27

Amount paid to F. Bachelder, paving . . . 1,790 21

\$6,962 48

STREET IMPROVEMENTS, WARD 10.

Batavia street, St. Stephen to Hemenway street, macadamized and regulated.Labor, teaming and materials furnished by the
City \$1,660 61

Amount paid to E. S. Fogerty, paving . . . 955 93

\$2,616 54**Cazenove street**, macadamized and regulated.

Labor, teaming and materials furnished by the City. \$674 99

Amount paid to F. Bachelder, paving . . . 320 43

\$995 42

Clarendon street, Tremont street to Columbus avenue, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$4,988 34
Amount paid to F. Bachelder, paving	1,391 07
	<u>\$6,379 41</u>

Columbus avenue, Boston & Albany Railroad bridge, to Massachusetts avenue, asphalt repaired.

Amount paid to Barber Asphalt Paving Company, asphaltting	<u>\$540 65</u>
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Dartmouth street, near Columbus avenue, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$390 22
Amount paid to F. Bachelder, paving	117 35
	<u>\$507 57</u>

Gray street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$1,030 38
Amount paid to F. Bachelder, paving	506 71
	<u>\$1,537 09</u>

Haviland street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$1,600 40
Amount paid to E. S. Fogerty, paving	240 73
	<u>\$1,841 13</u>

Lawrence street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$2,290 18
Amount paid to F. Bachelder, paving	1,091 12
	<u>\$3,381 30</u>

Massachusetts avenue, Beacon street to New York, New Haven & Hartford Railroad bridge, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$8,315 83
Amount paid to E. S. Fogerty, paving	556 04
	<u>\$8,871 87</u>

Amount paid out of appropriation for Street Improvements, Ward 10	\$3,419 95
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Amount paid out of appropriation for Street Improvements, Ward 11	<u>\$4,451 92</u>
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\$8,871 87

STREET DEPARTMENT — PAVING DIVISION. 87

Norway street, Massachusetts avenue to Falmouth street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$799 83
Amount paid to E. S. Fogerty, paving	578 36
	\$1,378 19

Amount paid out of appropriation for Street Improvements, Ward 10	\$913 84
Amount paid out of appropriation for Paving Division	464 35
	\$1,378 19

St. Stephen street, Massachusetts avenue to Gainsborough street, westerly side, regulated.

Gravel	\$135 00
Amount paid to E. S. Fogerty, paving	250 65
	\$385 65

Stanhope street, resurfaced.

Labor, teaming and materials furnished by the City,	\$279 70

STREET IMPROVEMENTS, WARD 11.

Anderson street, Cambridge to Pinckney street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,473 98
Amount paid to F. Bachelder, paving	803 21
	\$2,277 19

Beacon street, Massachusetts avenue to Charlesgate, resurfaced and regulated.

Labor, and materials furnished by the city	\$792 93
Amount paid to E. S. Fogerty, paving	1,591 51
	\$2,384 44

Beacon street, Dartmouth street to Massachusetts avenue, repairing asphalt.

Amount paid to Barber Asphalt Paving Company, asphalting	\$720 52

Commonwealth avenue, Beacon to St. Mary's street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$838 96
Amount paid to E. S. Fogerty, paving	1,493 18
	\$2,332 14

Garden street, Cambridge to Myrtle street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,336 28
Amount paid to F. Bachelder, paving	692 20
	<u>\$2,028 48</u>

Grove street, Cambridge to Myrtle street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,009 07
Amount paid to F. Bachelder, paving	742 88
	<u>\$1,751 95</u>

Irving street, Cambridge to Myrtle street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,454 87
Amount paid to F. Bachelder, paving	713 69
	<u>\$2,168 56</u>

Amount paid out of appropriation for Street Improvements, Ward 11	\$810 61
Amount paid out of appropriation for Paving Division	1,357 95
	<u>\$2,168 56</u>

Joy street, Cambridge to Beacon street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,269 19
Amount paid to F. Bachelder, paving	1,512 79
	<u>\$3,781 98</u>

Phillips street, W. Cedar to Irving street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,335 13
Amount paid to F. Bachelder, paving	849 68
	<u>\$2,184 81</u>

Pinckney street, Charles to Joy street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,874 82
Amount paid to F. Bachelder, paving	1,372 05
<i>Carried forward</i>	<u>\$3,246 87</u>

STREET DEPARTMENT — PAVING DIVISION. 89

<i>Brought forward</i>		\$3,246 87
Amount paid out of appropriation for Street Improvements, Ward 11	\$951 21	
Amount paid out of appropriation for Paving Division	2,295 66	
	<u> </u>	<u>\$3,246 87</u>

Revere street , Charles to Irving street, resurfaced and regulated.		
Labor, teaming and materials furnished by the City,	\$1,779 90	
Amount paid to F. Bachelder, paving	544 85	
	<u> </u>	<u>\$2,324 75</u>

STREET IMPROVEMENTS, WARD 12.

Claremont park , Columbus avenue to railroad, macadamized and regulated.		
Labor, teaming and materials furnished by the City,	\$2,091 43	
Amount paid to F. Bachelder, paving	493 65	
	<u> </u>	<u>\$2,585 08</u>

James street , East Brookline to East Concord street, macadamized and regulated.		
Labor, teaming and materials furnished by the City,	\$2,501 94	
Amount paid to F. Bachelder, paving	995 65	
	<u> </u>	<u>3,497 59</u>

Massachusetts avenue , Washington to Tremont street (north side), resurfaced and regulated.		
Labor, teaming and materials furnished by the City,	\$2,720 71	
Amount paid to F. Bachelder, paving	1,047 98	
	<u> </u>	<u>\$3,768 69</u>

Montgomery street , Tremont to West Canton street, resurfaced and regulated.		
Labor, teaming and materials furnished by the City,	\$3,759 94	
Amount paid to F. Bachelder, paving	1,344 07	
	<u> </u>	\$5,104 01

Amount paid out of appropriation for Street Improvements, Ward 12	\$3,481 21	
Amount paid out of appropriation for Paving Division	1,622 80	
	<u> </u>	<u>\$5,104 01</u>

West Newton street, Shawmut avenue to New York, New Haven and Hartford Railroad bridge, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$10,714 99
Amount paid to F. Bachelder, paving	689 12
	<u>\$11,404 11</u>

Repairing Asphalt streets.

Amount paid to Barber Asphalt Paving Company, asphaltting	<u>\$263 32</u>
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STREET IMPROVEMENTS, WARD 13.

Bolton street, D to E street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$809 99
Amount paid to Richard H. Houghton, paving	218 59
	<u>\$1,028 58</u>

Broadway, Dorchester avenue towards Foundry street (unfinished).

Labor	<u>\$84 20</u>
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Dorchester avenue, Railroad crossing to Andrew square, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$2,056 50
Amount paid to Barnes, Ruffin Company, paving	3,428 98
	<u>\$5,485 48</u>

STREET IMPROVEMENTS, WARD 14.

Dorchester street, Broadway to Third street, repaved.

Labor, teaming and materials furnished by the City,	\$427 42
Amount paid to Barnes, Ruffin Company, paving	536 94
	<u>\$964 36</u>

East Fourth street, N to P street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$984 30
Amount paid to Benj. M. Cram, paving	\$1,816 44
	<u>\$2,800 74</u>

East Third street, Dorchester to Emerson street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$220 21
Amount paid to Barnes, Ruffin Company, paving .	650 16
	<hr/>
	\$870 37

East Third street, N to O street, regulated (unfinished).

Labor, teaming and materials furnished by the City,	\$489 69
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Emerson street, K to M street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,166 18
Amount paid to R. C. Brown, paving	516 49
	<hr/>
	\$2,682 67

Emerson street, Dorchester to East Third street, resurfaced and regulated, and from East Third to H street repaved and regulated.

Labor, teaming and materials furnished by the City,	\$297 50
Amount paid to Barnes, Ruffin Company, paving .	262 38
	<hr/>
	\$559 88

H street, East Third to East Fifth street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,394 85
Amount paid to Redmond McDonough, paving .	839 06
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	\$2,233 91

I street, East Broadway to East Fourth street, asphalt repaired.

Amount paid to Barber Asphalt Paving Company, asphalting	\$270 98
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L street, East Broadway to East First street, resurfaced and regulated; East First street to bridge, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$3,147 88
Amount paid to Benj. M. Cram, paving	2,908 62
	<hr/>
	\$6,056 50

M street, East Broadway to East Eighth street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,679 54
Amount paid to Benj. M. Cram, paving	1,581 33
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	\$4,260 87

N street, East Broadway to East Fifth street, resurfaced and regulated, unfinished.

Labor	\$198 20
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STREET IMPROVEMENTS, WARD 15.

East Fourth street, Dorchester to H street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$3,309 95
Amount paid to R. H. Houghton, paving	1,048 18

\$4,353 13

East Sixth street, G to H street, macadamized, gutters paved, edgestone set, brick sidewalks laid (unfinished).

Labor, teaming and materials furnished by the City,	\$2,540 47
Amount paid to Redmond McDonough, paving . .	838 85

\$3,379 32

Amount paid out of appropriation for Street Improvements, Ward 15,	\$2,283 30
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Amount paid out of appropriation for Street Improvements, Ward 14,	1,096 02
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\$3,379 32

G street, East Fourth to Story street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,890 67
Amount paid to Benj. M. Cram, paving	426 34

\$2,317 01

Linden street, Thomas park to East Fourth street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,479 53
Amount paid to R. H. Houghton, paving	255 76

\$1,735 29

Old Harbor street, Dorchester to East Ninth street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$3,859 99
Amount paid to R. H. Houghton, paving	960 73

\$4,820 72

Pacific street, Thomas park to East Fourth street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$816 31
Amount paid to Benj. M. Cram, paving	204 72

\$1,021 03

STREET IMPROVEMENTS, WARD 16.

Brookford street, corner Rand street, repaved.

Labor, teaming and materials furnished by the City,	\$1,002 96
Amount paid to A. A. Libby & Co., paving . . .	161 42
	<u>\$1,164 38</u>

Folsom street and Robin Hood street, constructed and regulated.

Labor, teaming and materials furnished by the City,	\$448 30
Amount paid to T. O'Leary, excavating . . .	1,550 00
Amount paid to D. F. O'Connell, paving . . .	102 81
	<u>\$2,101 11</u>

Howell street, Dorchester avenue to Boston street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$238 97
Amount paid to R. H. Houghton, paving . . .	429 24
	<u>\$668 21</u>

Julian street, repaired.

Labor, teaming and materials furnished by the City,	\$119 00
Amount paid to A. A. Libby & Co., paving . . .	92 63
	<u>\$211 63</u>

Magnolia street, Quincy street to Lawrence avenue, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$600 27
Amount paid to D. F. O'Connell, paving . . .	210 00
	<u>\$810 27</u>

Massachusetts avenue, Edward Everett square to Swett street, graded and macadamized, gutters paved, edgestone set, gravel sidewalks built, and fences built.

Labor, teaming and materials furnished by the City,	\$35,303 48
Amount paid to D. F. O'Connell, paving . . .	894 14
Amount paid to F. Bachelder, paving . . .	977 60
	<u>\$37,175 22</u>

Amount paid out of appropriation for

Street Improvements, Ward 16 . \$8,563 10

Carried forward . . . \$8,563 10 \$37,175 22

<i>Brought forward</i>	\$8,563 10	\$37,175 22
Amount paid out of appropriation for Street Improvements, Ward 17	10,039 03	
Amount paid out of appropriation for Paving Division	18,573 09	
		<u>\$37,175 22</u>

Mayfield street, artificial stone sidewalks repaired.

Amount paid to W. A. Murtfeldt Co.	<u>\$471 36</u>
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Quincy street, Blue Hill avenue to Columbia road, macadamized, edgestone set, gutters paved, and sidewalks laid.

Labor, teaming and materials furnished by the City,	\$12,988 01
Amount paid to D. F. O'Connell, paving	1,742 15
	<u>\$14,730 16</u>

Amount paid out of appropriation for Street Improvements, Ward 16	\$11,009 94
Amount paid out of appropriation for Street Improvements, Ward 20	1,905 60
Amount paid out of appropriation for Paving Division	1,814 62
	<u>\$14,730 16</u>

STREET IMPROVEMENTS, WARD 17.

Albany street, at Randall street, repaved.

Labor, teaming and materials furnished by the City,	\$215 88
Amount paid to A. A. Libby & Co., paving	286 82
	<u>\$502 70</u>

Batchelder street, corner Burrell street, repaved.

Labor, teaming and materials furnished by the City,	\$206 86
Amount paid to A. A. Libby & Co., paving	126 57
	<u>\$333 43</u>

Dunmore and Magazine streets, around St. Patrick's Church, macadamized, edgestone set, gutters paved.

Labor, teaming and materials furnished by the City,	\$873 13
Amount paid to A. A. Libby & Co., paving	212 08
	<u>\$1,085 21</u>

Northampton street, Albany street to Harrison avenue, repaved and regulated (unfinished).

Labor, teaming and materials furnished by the City,	<u>\$1,276 33</u>
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STREET DEPARTMENT — PAVING DIVISION. 95

Palmer street, Harrison avenue to Eustis street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$884 36
Amount paid to A. A. Libby & Co., paving . . .	1,118 67
	\$2,003 03

Swett street, Massachusetts avenue to railroad bridge resurfaced, Massachusetts avenue to Albany street repaved and regulated.

Labor, teaming and materials furnished by the City,	\$8,182 91
Amount paid to A. A. Libby & Co., paving . . .	2,544 72
	\$10,727 63

Washington street, at Marvin street, repaved.

Materials furnished by the City	\$44 60
Amount paid to A. A. Libby & Co., paving . . .	64 31
	\$108 91

Winthrop street, Warren to Greenville street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$2,831 26
Amount paid to A. A. Libby & Co., paving . . .	877 86
	\$3,709 12

STREET IMPROVEMENTS, WARD 18.

Columbus avenue, Camden street to Roxbury crossing, regulated.

Labor, teaming and materials furnished by the City,	\$1,598 16
Amount paid to A. A. Libby & Co., paving . . .	3,337 31
	\$4,935 47

Amount paid out of appropriation for Street Improvements, Ward 18 . . .	\$3,323 19
Amount paid out of appropriation for Street Improvements, Ward 19 . . .	1,313 65
Amount paid out of appropriation for Street Improvements, Ward 22 . . .	298 63
	\$4,935 47

Greenwich street, Westminster to Warwick street, resurfaced and regulated.

Labor, teaming and material furnished by the City,	\$1,962 37
Amount paid to A. A. Libby & Co., paving . . .	461 43

<i>Carried forward</i>	\$2,423 80
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<i>Brought forward</i>	\$2,423 80
Amount paid out of appropriation for Street Improvements, Ward 18 . . .	\$1,609 26
Amount paid out of appropriation for Paving Division	814 54
	<u>\$2,423 80</u>

Hampshire street, Cabot to Whittier street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,034 68
Amount paid to A. A. Libby & Co., paving . . .	342 42
	<u>\$1,377 10</u>

Marble street, Warwick to Westminster street (south-west side) regulated.

Labor, teaming and materials furnished by the City,	\$551 49
Amount paid to A. A. Libby & Co., paving . . .	299 53
	<u>\$851 02</u>

Marvin street, Washington street to Shawmut avenue, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$623 05
Amount paid to A. A. Libby & Co., paving . . .	197 93
	<u>\$820 98</u>

Amount paid out of appropriation for Street Improvements, Ward 18 . . .	\$542 05
Amount paid out of appropriation for Street Improvements, Ward 17 . . .	278 93
	<u>\$820 98</u>

Ruggles street, Washington to Tremont street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$6,671 82
Amount paid to A. A. Libby & Co., paving . . .	2,041 23
	<u>\$8,713 05</u>

Amount paid out of appropriation for Street Improvements, Ward 18 . . .	\$7,123 56
Amount paid out of appropriation for Paving Division	1,589 49
	<u>\$8,713 05</u>

Shawmut avenue, Ruggles to Roxbury street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$1,925 90
Amount paid to A. A. Libby & Co., paving . . .	1,893 81

<i>Carried forward</i>	\$3,819 71
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STREET DEPARTMENT — PAVING DIVISION. 97

<i>Brought forward</i>		\$3,819 71
Amount paid out of appropriation for		
Street Improvements, Ward 18	\$346 50	
Amount paid out of appropriation for		
Street Improvements, Ward 17	1,874 06	
Amount paid out of appropriation for		
Paving Division	1,599 15	
	<u> </u>	<u>\$3,819 71</u>

Sussex street, Warwick to Westminster street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$255 80
Amount paid to A. A. Libby & Co., paving	177 44
	<u>\$433 24</u>

Warwick street, Ruggles to Hammond street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$4,036 87
Amount paid to A. A. Libby & Co., paving	1,444 08
	<u>\$5,480 95</u>
Amount paid out of appropriation for	
Street Improvements, Ward 18	\$2,417 43
Amount paid out of appropriation for	
Paving Division	3,063 52
	<u>\$5,480 95</u>

Westminster street, Ruggles to Hammond street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$3,036 53
Amount paid to A. A. Libby & Co., paving	1,069 81
	<u>\$4,106 34</u>
Amount paid out of appropriation for	
Street Improvements, Ward 18	\$1,808 31
Amount paid out of appropriation for	
Paving Division	2,298 03
	<u>\$4,106 34</u>

Weston street, Cabot to Warwick street, resurfaced.

Materials furnished by the City	\$8 07
Amount paid to A. A. Libby & Co., paving	181 99
	<u>\$190 06</u>

Whittier street, Tremont to Cabot street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,267 12
Amount paid to A. A. Libby & Co., paving	653 38
	<hr/>
	\$1,920 50
	<hr/>

Windsor street, Warwick street to Shawmut avenue, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$3,933 42
Amount paid to A. A. Libby & Co., paving	991 33
	<hr/>
	\$4,924 75

Amount paid out of appropriation for	
Street Improvements, Ward 18	\$3,057 78
Amount paid out of appropriation for	
Paving Division	1,866 97
	<hr/>
	\$4,924 75
	<hr/>

STREET IMPROVEMENTS, WARD 19.

Brookline avenue, Boston & Albany Railroad bridge to Boylston street, resurfaced and gutters relaid.

Labor, teaming and materials furnished by the City,	\$2,010 20
Amount paid to E. S. Fogerty, paving	630 00
	<hr/>
	\$2,640 20
	<hr/>

Calumet street, Pequot to St. Alphonsus street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	\$8,014 65
Amount paid to A. A. Libby & Co., paving	1,567 62
	<hr/>
	\$9,582 27

Amount paid out of appropriation for	
Street Improvements, Ward 19	\$685 00
Amount paid out of appropriation for	
Paving Division	8,897 27
	<hr/>
	9,582 27
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Heath street, Huntington to Columbus avenue resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$9,275 57
Amount paid to A. A. Libby & Co., paving	406 93
	<hr/>
	\$9,682 50
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STREET DEPARTMENT — PAVING DIVISION. 99

Huntington avenue, Gainsborough to Francis street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$9,631 56
Amount paid to E. S. Fogerty, paving	2,985 56
	<hr/>
	\$12,617 12

Amount paid out of appropriation for Street Improvements, Ward 19	\$5,793 03
Amount paid out of appropriation for Paving Division	6,622 34
Amount paid out of appropriation for Street Improvements, Ward 10	201 75
	<hr/>
	\$12,617 12

Parker street, Tremont street to Parker Hill avenue, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$3,431 37
Amount paid to A. A. Libby & Co., paving	2,606 27
	<hr/>
	\$6,037 64

Amount paid out of appropriation for Street Improvements, Ward 19	\$4,125 37
Amount paid out of appropriation for Street Improvements, Ward 22	1,912 27
	<hr/>
	\$6,037 64

Parker Hill avenue, Hillside to Darling and Parker to Calumet street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,913 04
Amount paid to A. A. Libby & Co., paving	989 38
	<hr/>
	\$3,902 42

Amount paid out of appropriation for Street Improvements, Ward 19	\$314 00
Amount paid out of appropriation for Street Improvements, Ward 22	817 88
Amount paid out of appropriation for Paving Division	2,770 54
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	\$3,902 42

Terrace street, repaved.

Amount paid to A. A. Libby & Co., paving	\$446 25
	<hr/>

STREET IMPROVEMENTS, WARD 20.

Blue Hill avenue, Intervale street to Lawrence avenue, paved with large granite blocks, and regulated. (Unfinished.)

Labor, teaming and materials furnished by the City,	\$5,404 92
	<hr/>

Chamberlain street, Harvard to Algonquin street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$134 33
Amount paid to D. F. O'Connell, paving . . .	353 69
	<u>\$488 02</u>

Dorchester avenue, Van Winkle to Richmond street, repaved and regulated.

Amount paid to D. F. O'Connell, paving . . .	<u>\$2,191 27</u>
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Glenway street, Blue Hill avenue to Harvard street, macadamized, edgestone set, gutters paved.

Labor, teaming and materials furnished by the City,	\$6,028 06
Amount paid to D. F. O'Connell, paving . . .	1,460 76
	<u>\$7,488 82</u>

Grampian way, resurfaced.

Labor, teaming and materials furnished by the City,	<u>\$168 25</u>
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Lawrence avenue, Blue Hill avenue to Magnolia street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,634 66
Amount paid to D. F. O'Connell, paving . . .	762 07
	<u>\$2,396 73</u>

Park street, Waldeck to Washington street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,790 97
Amount paid to D. F. O'Connell, paving . . .	400 16
	<u>\$3,191 13</u>

Savin Hill avenue, Dorchester avenue to railroad bridge, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,722 37
Amount paid to D. F. O'Connell, paving . . .	1,036 96
	<u>\$3,759 33</u>

Stoughton street, at Cemetery, laying new brick sidewalks.

Materials furnished by the City	\$276 00
Amount paid to D. F. O'Connell, paving . . .	95 25
	<u>\$371 25</u>

STREET DEPARTMENT — PAVING DIVISION. 101

Willis street, from Pleasant street, edgestone set
and sidewalks laid.

Materials furnished by the City	\$182 33
Amount paid to D. F. O'Connell, paving	102 79
	<u>\$285 12</u>

STREET IMPROVEMENTS, WARD 21.

Bartlett street, near Washington street, resurfaced. (Un-
finished.)

Labor and teaming furnished by the City	<u>\$388 10</u>
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Blue Hill avenue, at Maywood street, repaved.

Labor, teaming and materials furnished by the City,	\$179 00
Amount paid to A. A. Libby & Co., paving . . .	52 46
	<u>\$231 46</u>

Brunswick street, Warren street to Blue Hill avenue, resur-
faced and regulated.

Labor, teaming and materials furnished by the City,	\$1,236 13
Amount paid to A. A. Libby & Co., paving . . .	253 53
	<u>\$1,489 66</u>

Clifford street, Warren street to Blue Hill avenue, resurfaced
and regulated.

Labor, teaming and materials furnished by the City,	\$5,044 90
Amount paid to A. A. Libby & Co., paving . . .	1,296 59
	<u>\$6,341 49</u>

Amount paid out of appropriation for

Street Improvements, Ward 21 . . \$4,852 14

Amount paid out of appropriation for

Paving Division 1,489 35

\$6,341 49

Crawford street, Humboldt avenue to Elm Hill avenue, resur-
faced and regulated.

Labor, teaming and materials furnished by the City.	\$746 26
Amount paid to A. A. Libby & Co., paving . . .	995 07
	<u>\$1,742 33</u>

Harold street, near Harrishof street, resurfaced.

Labor, teaming and materials furnished by the City,	\$166 40
Amount paid to A. A. Libby & Co., paving . . .	43 22
	<u>\$209 62</u>

Harrishof street, near Harold street, resurfaced.

Labor, teaming and materials furnished by the City,	\$883 77
Amount paid to A. A. Libby & Co., paving .	210 66
	<u>\$1,094 43</u>

Hewes street, Rockland to Regent street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$38 57
Amount paid to A. A. Libby & Co., paving .	204 08
	<u>\$242 65</u>

Hollander street, near Harold street, resurfaced.

Labor, teaming and materials furnished by the City,	<u>\$435 67</u>
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Howland street, Elm Hill avenue to Humboldt avenue.

Labor, teaming and materials furnished by the City,	\$244 11
Amount paid to A. A. Libby & Co., paving .	679 07
	<u>\$923 18</u>

Humboldt avenue, Townsend to Hollander street, rock blasted and resurfaced.

Labor, teaming and materials furnished by the City,	\$512 60
Amount paid to Thomas O'Leary, blasting .	1,056 00
Amount paid to A. A. Libby & Co., paving .	48 67
	<u>\$1,617 27</u>

Otisfield street, Blue Hill avenue to Gaston street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$3,333 67
Amount paid to A. A. Libby & Co., paving .	375 51
	<u>\$3,709 18</u>

Amount paid out of appropriation for

Street Improvements, Ward 21 . \$2,513 90

Amount paid out of appropriation for

Paving Division 1,195 28

\$3,709 18**St. James street**, Warren to Washington street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,600 25
Amount paid to A. A. Libby & Co., paving .	1,030 08
	<u>\$2,630 33</u>

STREET DEPARTMENT — PAVING DIVISION. 103

Sunderland street, near Warren street, edgestones set, gutters paved.

Materials furnished by the City	\$125 41
Amount paid to A. A. Libby & Co., paving	144 31
	<u>\$269 72</u>

Wabon street, Warren to Wabeno street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,359 45
Amount paid to A. A. Libby & Co., paving	878 33
	<u>\$3,237 78</u>

Amount paid out of appropriation for

Street Improvements, Ward 21 . . \$2,331 50

Amount paid out of appropriation for

Paving Division 906 28

\$3,237 78

Washington street, Guild to Dale street, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$1,389 88
Amount paid to A. A. Libby & Co., paving	1,921 19
	<u>\$3,311 07</u>

Amount paid out of appropriation for

Street Improvements, Ward 21 . . \$2,953 27

Amount paid out of appropriation for

Paving Division 357 80

\$3,311 07

Waumbeck street, resurfaced.

Labor, teaming and materials furnished by the City,	<u>\$377 08</u>
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Waverley street, resurfaced.

Labor, teaming and materials furnished by the City,	<u>\$697 74</u>
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STREET IMPROVEMENTS, WARD 22.

Bickford street, Heath to Centre street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,646 65
Amount paid to A. A. Libby & Co., paving	1,093 20
	<u>\$3,739 85</u>

Cornwall street, Washington street to Brookside avenue, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$424 65
Amount paid to S. D. Payson, paving	195 60
	<u>\$620 25</u>

Lamartine street, Paul Gore to Green street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$605 67
Amount paid to S. D. Payson, paving	467 92
	<u>\$1,073 59</u>

Oakdale street, resurfaced.

Amount paid to S. D. Payson, paving	<u>\$165 75</u>
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School street, resurfaced, unfinished.

Labor, teaming and materials furnished by the City,	<u>\$21 98</u>
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Washington street, Townsend street to Columbus avenue, repaved and regulated.

Labor, teaming and materials furnished by the City,	\$3,945 86
Amount paid to A. A. Libby & Co., paving	1,525 49
	<u>\$5,471 35</u>

Westminster avenue, repaved,

Amount paid to A. A. Libby & Co., paving	<u>\$210 38</u>
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STREET IMPROVEMENTS, WARD 23.

Anawan avenue, Beech street to Central station, gutters paved.

Labor, teaming and materials furnished by the City,	\$145 27
Amount paid to S. D. Payson, paving	112 80
	<u>\$258 07</u>

Beech street, Poplar to Colberg street, resurfaced.

Labor, teaming and materials furnished by the City,	\$848 71
Amount paid to S. D. Payson, paving	24 00
	<u>\$872 71</u>

Centre street, Walter street to Green Hill avenue, repaved.

Labor, teaming and materials furnished by the City,	\$70 15
Amount paid to S. D. Payson, paving	371 20
	<u>\$441 35</u>

STREET DEPARTMENT — PAVING DIVISION. 105

Corey street, Centre to Weld street, resurfaced.

Labor, teaming and materials furnished by the City,	\$113 13
Amount paid to S. D. Payson, paving	277 65
	<u>\$390 78</u>

Dale street, Poplar street to Hyde Park line, resurfaced.

Labor, teaming and materials furnished by the City,	641 75
Amount paid to S. D. Payson, paving	24 00
	<u>\$665 75</u>

Forest Hills street, resurfaced.

Materials furnished by the City	\$8 80
Amount paid to S. D. Payson, paving	327 60
	<u>\$336 40</u>

Green street, resurfaced.

Teaming and materials furnished by the City . .	\$15 00
Amount paid to S. D. Payson, paving	233 88
	<u>\$248 88</u>

Harvard street, Ashland to Morton street, resurfaced.

Labor, teaming and materials furnished by the City,	<u>\$785 00</u>
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Hastings street, resurfaced.

Materials furnished by the City	46 07
Amount paid to S. D. Payson, paving	410 00
	<u>\$456 07</u>

Hyde Park avenue, resurfaced.

Teaming and materials furnished by the City . .	\$55 00
Amount paid to S. D. Payson, paving	28 50
	<u>\$83 50</u>

LaGrange street, Centre to Pleasant street, resurfaced.

Labor, teaming and materials furnished by the City,	\$280 08
Amount paid to S. D. Payson, paving	369 35
	<u>\$649 43</u>

Park street, Centre to Oriole street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$4,231 79
Amount paid to S. D. Payson, paving	883 14

<i>Carried forward</i>	<u>\$5,114 93</u>
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<i>Brought forward</i>		\$5,114 93
Amount paid out of appropriation for Street Improvements, Ward 23	\$2,392 06	
Amount paid out of appropriation for Paving Division	2,722 87	
		<u>\$5,114 93</u>

Perkins street , widened and resurfaced.		
Labor, teaming and materials, furnished by the City,		\$753 87
Amount paid to S. D. Payson, paving		21 75
		<u>\$775 62</u>
Amount paid out of appropriation for Street Improvements, Ward 23	\$442 00	
Amount paid out of appropriation for Street Improvements, Ward 22	333 62	
		<u>\$775 62</u>

Prospect avenue , resurfaced.		
Amount paid to S. D. Payson, paving		<u>\$126 75</u>

St. Rose street , from Jamaica street, macadamized and regulated.		
Labor, teaming and materials, furnished by the City,		\$1,326 13
Amount paid to S. D. Payson, paving		222 20
		<u>\$1,548 33</u>

Seaverns avenue , repaved.		
Amount paid to S. D. Payson, paving		<u>\$899 01</u>

Spring street , Cass to Centre street, resurfaced.		
Materials furnished by the City		\$211 23
Amount paid to S. D. Payson, paving		385 20
		<u>\$596 43</u>

Temple street , Ivory to Mt. Vernon street, macadamized and regulated.		
Labor, teaming, and materials furnished by the City,		\$8,869 16
Amount paid to S. D. Payson, paving		876 00
		<u>\$9,745 16</u>
Amount paid out of appropriation for Street Improvements, Ward 23	\$6,432 14	
Amount paid out of appropriation for Paving Division	3,313 02	
		<u>\$9,745 16</u>

STREET DEPARTMENT — PAVING DIVISION. 107

Wachusett street, from Walk Hill street, resurfaced.

Labor, teaming and materials furnished by the City,	\$378 82
Amount paid to S. D. Payson, paving	120 90
	<hr/>
	<u>\$499 72</u>

Washington street, Forest Hills to Ashland street, resurfaced and regulated.

Labor, teaming and materials, furnished by the City,	\$5,959 81
Amount paid to S. D. Payson, paving	2,138 10
	<hr/>
	\$8,097 91

Amount paid out of appropriation for	
Street Improvements, Ward 23	\$6,803 62
Amount paid out of appropriation for	
Paving Division	1,294 29
	<hr/>
	<u>\$8,097 91</u>

Williams street, resurfaced.

Amount paid to S. D. Payson, paving	<u>\$72 00</u>
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STREET IMPROVEMENTS, WARD 24.

Adams street, Neponset avenue to Granite avenue, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$5,580 91
Amount paid to D. F. O'Connell, paving	3,022 60
	<hr/>
	<u>\$8,603 51</u>

Ashmont street, Adams street to Dorchester avenue, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$347 35
Amount paid to D. F. O'Connell, paving	731 55
	<hr/>
	<u>\$1,078 90</u>

Bailey street, Washington street to Dorchester avenue, resurfaced.

Labor, teaming and materials furnished by the City,	\$635 70
Amount paid to D. F. O'Connell, paving	1,444 14
	<hr/>
	<u>\$2,079 84</u>

Bushnell street, Beale to Weyanoke street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$692 02
Amount paid to D. F. O'Connell, paving	368 14
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	<u>\$1,060 16</u>

Mather street, Dorchester avenue to Allston street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,903 09
Amount paid to D. F. O'Connell, paving	710 20
	<u>\$2,613 29</u>

Amount paid out of appropriation for	
Street Improvements, Ward 24 .	\$1,838 70
Amount paid out of appropriation for	
Street Improvements, Ward 20 .	774 59
	<u>\$2,613 29</u>

River street, Washington street to Central avenue, resurfaced.

Labor, teaming and materials furnished by the City,	\$678 55
	<u></u>

School street, plankwalk laid, unfinished.

Lumber	\$38 17
	<u></u>

Washington street, Codman street to Talbot avenue, resurfaced.

Labor, teaming and materials furnished by the City,	\$1,691 28
	<u></u>

Wessex street, Weyanoke to Codman street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,200 97
Amount paid to D. F. O'Connell, paving	71 60
	<u>\$1,272 57</u>

STREET IMPROVEMENTS, WARD 25.

Bennett street, from Parsons street, new gutters on one side.

Labor, teaming and materials furnished by the City,	\$102 82
Amount paid to James Doherty, paving	75 00
	<u>\$177 82</u>

Bentley street, Sparhawk to Henshaw street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,044 79
Amount paid to James Doherty, paving	181 26
	<u>\$2,226 05</u>

Brooks-street bridge.

Amount retained from Boston & Albany R.R. Co.	
from 1899	\$5,503 32
	<u></u>

STREET DEPARTMENT — PAVING DIVISION. 109

Chestnut Hill avenue, Beacon street to Commonwealth avenue, gutters relaid.

Labor, teaming and materials furnished by the City,	\$103 38
Amount paid to James Doherty, paving . . .	142 40
	\$245 78

Commonwealth avenue, St. Mary's to St. Paul street, regulated

Amount paid to James Doherty, paving . . .	\$995 88
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Dunboy street, Faneuil to Bigelow street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,908 54
Amount paid to James Doherty, paving . . .	418 80
	\$2,327 34

Dustin street, Beacon to Garden street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$968 02
Amount paid to James Doherty, paving . . .	355 60
	\$1,323 62

Amount paid out of appropriation for Street Improvements, Ward 25 .	\$951 75	
Amount paid out of appropriation for Paving Division	371 87	
	\$1,323 62	

Elko street, new dish gutter.

Teaming and materials furnished by the City . .	\$41 73
Amount paid to James Doherty, paving . . .	38 80
	\$80 53

Everett street, North Beacon street to the bridge, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$2,002 71
Amount paid to James Doherty, paving . . .	197 60
	\$2,200 31

Amount paid out of appropriation for street improvements, Ward 25 .	\$1,720 61	
Amount paid out of appropriation for Paving Division	479 70	
	\$2,200 31	

Faneuil street, resurfaced.

Labor, teaming and materials furnished by the City,	\$34 29
Amount paid to James Doherty, paving	5 60
	<u>\$39 89</u>

Foster street, Washington street to Commonwealth avenue, edgestone reset, gutters relaid.

Labor, teaming and materials furnished by the City,	\$262 83
Amount paid to James Doherty, paving	2,047 82
	<u>\$2,310 65</u>

Hardwick street, Dunboy to Bigelow street, macadamized and regulated.

Labor, teaming and materials furnished by the City,	<u>\$2,237 66</u>
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Harvard avenue, Brighton to Farrington avenue, repaved, one side.

Labor, teaming and materials furnished by the City,	\$35 75
Amount paid to James Doherty, paving	108 14
	<u>\$143 89</u>

Mt. Vernon street, Rockland to Foster street, gutters relaid.

Teaming and materials furnished by the City	\$70 92
Amount paid to James Doherty, paving	227 60
	<u>\$298 52</u>

Nonantum street, gutters relaid.

Gravel furnished by the City	\$60 06
Amount paid to James Doherty, paving	131 20
	<u>\$191 26</u>

Oakland street, Faneuil to Washington street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$866 31
Amount paid to James Doherty, paving	330 80
	<u>\$1,197 11</u>

Parsons street, Faneuil to Surrey street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$1,744 00
Amount paid to James Doherty, paving	791 62

Carried forward \$2,535 62

STREET DEPARTMENT—PAVING DIVISION. 111

<i>Brought forward</i>	\$2,535 62
Amount paid out of appropriation for Street Improvements, Ward 25	\$2,216 90
Amount paid out of appropriation for Paving Division	318 72
	<u>\$2,535 62</u>

Raymond street, Everett to Franklin street, resurfaced and regulated.

Labor, teaming and materials furnished by the City,	\$641 05
Amount paid to James Doherty, paving	387 60
	<u>\$1,028 65</u>

Rockland street, Peaceable street to High-School place, regulated.

Teaming and materials furnished by the City	\$84 71
Amount paid to James Doherty, paving	543 62
	<u>\$628 33</u>

Union street, Washington street to Howard place, resurfaced.

Labor, teaming and materials furnished by the City,	<u>\$235 37</u>
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Washington street, Commonwealth avenue to Brookline line, regulated.

Materials furnished by the City	\$32 89
Amount paid to James Doherty, paving	209 80
	<u>\$242 69</u>

SUMMARY OF EXPENDITURES UNDER SPECIAL APPROPRIATIONS.

Atlantic avenue, Oliver to Commercial street	\$67,420 38
Beacon street, Arlington to Dartmouth street	28,962 34
Boylston street, Arlington to Berkeley street	14,154 87
Buildings, Chelsea street	9,048 34
Charles street, Fruit to Allen street	318 80
Commercial street, Fleet to Clinton street	92 38
Commercial street, Prince street to Eastern avenue, Commonwealth avenue	28,776 20
Congress street, Atlantic avenue to bridge	4,105 54
Devonshire street, State to Water street	273 72
Freeport street, Ward 24, retaining wall	6,939 38
Harrison avenue, Asylum to Davis street	4,223 72
Neponset avenue, Adams to Minot street	12 16
Oliver street, Atlantic avenue to Milk street	371 99
	23,200 00

Carried forward \$187,899 82

<i>Brought forward</i>	\$187,899 82
Retaining wall, Marcella and Centre streets	6,604 07
Summer street, Washington to Federal streets	17,851 16
Talbot avenue	1,093 37
Temple place	5,222 83
Tremont street, Court to Boylston street	51,846 11
Abolishment of Grade Crossings	416 00
Charlestown bridge	3,806 74
Charlestown street	1,078 10
Malden bridge	1,881 65
South Union Station :	
Atlantic avenue and Dewey square	28,556 98
Street Improvements, Ward 1 :	
Breed street	317 94
Brooks street	538 90
Chelsea street	647 38
Eutaw street	2,215 49
Lexington street	2,778 18
Marion street	5,425 17
Meridian street	2,851 98
Monmouth street	679 04
Morris street	54 24
Princeton street	329 65
Putnam street	756 95
Saratoga street	212 75
Trenton street	3,984 68
White street	213 20
Street Improvements, Ward 2 :	
Cottage street	4,304 27
Henry street	409 26
Liverpool street	508 80
Marginal street	139 60
Paris street	3,101 13
Ruth street	14 00
Winthrop street	307 09
Street Improvements, Ward 3 :	
Ferrin street	409 26
High street	3,251 73
Mt. Vernon street	1,226 33
Pearl street	2,123 74
Stone street	66 33
Street Improvements, Ward 4 :	
Allston street	1,588 74
Caldwell street	1,673 87
Street Improvements, Ward 5 :	
Chelsea street	4,467 42
Cordis street	66 39
Gray street	1,131 39
Park street	382 57
Pleasant street	2,034 29
<i>Carried forward</i>	\$353,968 59

<i>Brought forward.</i>	.	.	.	.	.	\$353,968	59
Street Improvements, Ward 6 :							
Blackstone street	.	.	.	.	.	100	79
Central street	.	.	.	.	.	162	94
Charter street	.	.	.	.	.	1,085	49
Congress square	.	.	.	.	.	820	93
Creek square	.	.	.	.	.	993	08
Devonshire street, Milk to Water street	.	.	.	.	.	157	73
Endicott street	.	.	.	.	.	180	87
Friend street	.	.	.	.	.	1,542	42
Haverhill street	.	.	.	.	.	1,990	87
Merrimac street	.	.	.	.	.	307	41
Pemberton square	.	.	.	.	.	186	50
Prince street	.	.	.	.	.	1,698	23
Sudbury street	.	.	.	.	.	851	48
Street Improvements, Ward 7 :							
Atlantic avenue	.	.	.	.	.	674	65
Bosworth street	.	.	.	.	.	769	01
Boylston street	.	.	.	.	.	1,635	08
Broadway	.	.	.	.	.	2,852	20
Devonshire street	.	.	.	.	.	622	70
Federal street	.	.	.	.	.	501	14
Harrison avenue	.	.	.	.	.	205	75
Hawley street	.	.	.	.	.	349	70
Hayward place	.	.	.	.	.	83	42
Kingston street	.	.	.	.	.	402	06
Kneeland street	.	.	.	.	.	455	29
Mason street	.	.	.	.	.	130	66
Mason street	.	.	.	.	.	583	00
Otis street	.	.	.	.	.	473	35
Tremont street	.	.	.	.	.	3,294	97
Repairing asphalt streets	.	.	.	.	.	160	23
Street Improvements, Ward 8 :							
Chambers street	.	.	.	.	.	1,935	44
Leverett street	.	.	.	.	.	106	89
Milton street	.	.	.	.	.	49	98
Norman street	.	.	.	.	.	1,828	71
Pitts street	.	.	.	.	.	1,622	86
South Margin street	.	.	.	.	.	1,407	90
Street Improvements, Ward 9 :							
Compton street	.	.	.	.	.	3,712	79
Dover street	.	.	.	.	.	977	51
Genesee street	.	.	.	.	.	332	21
Lehigh street	.	.	.	.	.	592	97
Rollins street	.	.	.	.	.	1,137	14
Savoy street	.	.	.	.	.	637	75
Union Park street	.	.	.	.	.	6,962	48
Street Improvements, Ward 10 :							
Batavia street	.	.	.	.	.	2,616	54
<i>Carried forward</i>	.	.	.	.	.	\$401,161	71

<i>Brought forward</i>	\$401,161 71
Cazenove street	995 42
Clarendon street	6,379 41
Columbus avenue	540 65
Dartmouth street	507 57
Gray street	1,537 09
Haviland street	1,841 13
Lawrence street	3,381 30
Massachusetts avenue	8,871 87
Norway street	1,378 19
St. Stephen street	385 65
Stanhope street	279 70
Street Improvements, Ward 11 :	
Anderson street	2,277 19
Beacon street, Massachusetts avenue to Charles- gate	2,384 44
Beacon street, Massachusetts avenue to Dart- mouth street	720 52
Commonwealth avenue	2,332 14
Garden street	2,028 48
Grove street	1,751 95
Irving street	2,168 56
Joy street	3,781 98
Phillips street	2,184 81
Pinckney street	3,246 87
Revere street	2,324 75
Street Improvements, Ward 12 :	
Claremont park	2,585 08
James street	3,497 59
Massachusetts avenue	3,768 69
Montgomery street	5,104 01
W. Newton street	11,404 11
Repairing asphalt streets	263 32
Street Improvements, Ward 13 :	
Bolton street	1,028 58
Broadway	84 20
Dorchester avenue	5,485 48
Street Improvements, Ward 14 :	
Dorchester street	964 36
E. Fourth street, N to P street	2,800 74
E. Third street, Dorchester to Emerson street	870 37
E. Third street, N to O street	489 69
Emerson street, K to M street	2,682 67
Emerson street, Dorchester to H street	559 88
H street	2,233 91
I street	270 98
L street	6,056 50
M street	4,260 87
N street	198 20
<i>Carried forward</i>	\$507,070 61

STREET DEPARTMENT—PAVING DIVISION. 115

<i>Brought forward</i>		\$507,070 61
Street Improvements, Ward 15 :		
E. Fourth street, Dorchester to H street	4,353 13	
E. Sixth street	3,379 32	
G street	2,317 01	
Linden street	1,735 29	
Old Harbor street	4,820 72	
Pacific street	1,021 03	
Street Improvements, Ward 16 :		
Brookford street	1,164 38	
Folsom street	2,101 11	
Howell street	668 21	
Julian street	211 63	
Magnolia street	810 27	
Massachusetts avenue	37,175 22	
Mayfield street	471 36	
Quincy street	14,730 16	
Street Improvements, Ward 17 :		
Albany street	502 70	
Batchelder street	333 43	
Dunmore street	1,085 21	
Northampton street	1,276 33	
Palmer street	2,003 03	
Swett street	10,727 63	
Washington street	108 91	
Winthrop street	3,709 12	
Street Improvements, Ward 18 :		
Columbus avenue	4,935 47	
Greenwich street	2,423 80	
Hampshire street	1,377 10	
Marble street	851 02	
Marvin street	820 98	
Ruggles street	8,713 05	
Shawmut avenue	3,819 71	
Sussex street	433 24	
Warwick street	5,480 95	
Westminster street	4,106 34	
Weston street	190 06	
Whittier street	1,920 50	
Windsor street	4,924 75	
Street Improvements, Ward 19 :		
Brookline avenue	2,640 20	
Calumet street	9,582 27	
Heath street	9,682 50	
Huntington avenue	12,617 12	
Parker street	6,037 64	
Parker Hill avenue	3,902 42	
Terrace street	446 25	
<i>Carried forward</i>	\$686,681 18	

<i>Brought forward</i>	.	.	.	.	.	.	\$686,681 18
Street Improvements, Ward 20 :							
Blue Hill avenue	.	.	.	.	.	.	5,404 92
Chamberlain street	.	.	.	.	.	.	488 02
Dorchester avenue	.	.	.	.	.	.	2,191 27
Glenway street	.	.	.	.	.	.	7,488 82
Grampian way	.	.	.	.	.	.	168 25
Lawrence avenue	.	.	.	.	.	.	2,396 73
Park street	.	.	.	.	.	.	3,191 13
Savin Hill avenue	.	.	.	.	.	.	3,759 33
Stoughton street	.	.	.	.	.	.	371 25
Willis street	.	.	.	.	.	.	285 12
Street Improvements, Ward 21 :							
Bartlett street	.	.	.	.	.	.	388 10
Blue Hill avenue	.	.	.	.	.	.	231 46
Brunswick street	.	.	.	.	.	.	1,489 66
Clifford street	.	.	.	.	.	.	6,341 49
Crawford street	.	.	.	.	.	.	1,742 33
Harold street	.	.	.	.	.	.	209 62
Harrishof street	.	.	.	.	.	.	1,094 43
Hewes street	.	.	.	.	.	.	242 65
Hollander street	.	.	.	.	.	.	435 67
Howland street	.	.	.	.	.	.	923 18
Humboldt avenue	.	.	.	.	.	.	1,617 27
Otisfield street	.	.	.	.	.	.	3,709 18
St. James street	.	.	.	.	.	.	2,630 33
Sunderland street	.	.	.	.	.	.	269 72
Wabon street	.	.	.	.	.	.	3,237 78
Washington street	.	.	.	.	.	.	3,311 07
Waumbeck street	.	.	.	.	.	.	377 03
Waverley street	.	.	.	.	.	.	697 74
Street Improvements, Ward 22 :							
Bickford street	.	.	.	.	.	.	3,739 85
Cornwall street	.	.	.	.	.	.	620 25
Lamartine street	.	.	.	.	.	.	1,073 59
Oakdale street	.	.	.	.	.	.	165 75
School street	.	.	.	.	.	.	21 98
Washington street	.	.	.	.	.	.	5,471 35
Westminster avenue	.	.	.	.	.	.	210 38
Street Improvements, Ward 23 :							
Anawan avenue	.	.	.	.	.	.	258 07
Beech street	.	.	.	.	.	.	872 71
Centre street	.	.	.	.	.	.	441 35
Corey street	.	.	.	.	.	.	390 78
Dale street	.	.	.	.	.	.	665 75
Forest Hills street	.	.	.	.	.	.	336 40
Green street	248 88
Harvard street	785 00
Hastings street	456 07
<i>Carried forward</i>	\$757,132 89

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Brought forward		\$757,132 89
Hyde Park avenue		83 50
LaGrange street		649 43
Park street		5,114 93
Perkins street		775 62
Prospect avenue		126 75
St. Rose street		1,548 33
Seaverns avenue		899 01
Spring street		596 43
Temple street		9,745 16
Wachusett street		499 72
Washington street		8,097 91
Williams street		72 00
Street Improvements, Ward 24 :		
Adams street		8,603 51
Ashmont street		1,078 90
Bailey street		2,079 84
Bushnell street		1,060 16
Mather street		2,613 29
River street		678 55
School street		38 17
Washington street		1,691 23
Wessex street		1,272 57
Street Improvements, Ward 25 :		
Bennett street		177 82
Bentley street		2,226 05
Brooks street bridge		5,503 32
Chestnut Hill avenue		245 78
Commonwealth avenue		995 88
Dunboy street		2,327 34
Dustin street		1,323 62
Elko street		80 53
Everett street		2,200 31
Faneuil street		39 89
Foster street		2,310 65
Hardwick street		2,237 66
Harvard avenue		143 89
Mt. Vernon street		298 52
Nonantum street		191 26
Oakland street		1,197 11
Parsons street		2,535 62
Raymond street		1,028 65
Rockland street		628 33
Union street		235 37
Washington street		242 69
		<hr/>
		\$830,628 19
Less amount paid out of appropriation for Paving Division		75,037 88
		<hr/>
		\$755,590 31

BLUE HILL AND OTHER AVENUES.

Blue Hill avenue, Walk Hill to River street.

Labor, teaming and materials furnished by the City,	\$2,947 64
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Columbus avenue.

Sand	\$66 60
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Amount retained from D. E. Lynch for work done, under contract	107 40
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	<u>\$174 00</u>
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Commonwealth avenue.

Labor, teaming and materials furnished by the City,	\$54,686 87
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Amount paid to James Doherty, paving	769 66
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Amount paid to Barnes, Ruffin Company, paving	99 09
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	<u>\$55,555 62</u>
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*SUMMARY OF EXPENDITURES FOR BLUE
HILL AND OTHER AVENUES.*

Blue Hill avenue	\$2,947 64
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Columbus avenue	174 00
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Commonwealth avenue	55,555 62
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	<u>\$58,677 26</u>
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*LAYING-OUT AND CONSTRUCTION OF
HIGHWAYS.***Aberdeen street, Beacon street to Brookline Branch, Boston &
Albany Railroad.**

Labor, teaming and materials furnished by the City,	\$2,184 14
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Amount paid to J. O'Brien & Son, construction work	1,811 84
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Amount paid to Taylor, Carr & Andrews, artifi- cial stone sidewalks	710 55
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	<u>4,706 53</u>
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Alford street, Mystic river to Everett line.

Labor	\$97 50
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Angell street, Blue Hill avenue to Canterbury street.

Labor	\$7 13
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Amount retained from James Doherty for work done in 1899, under contract	208 64
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	<u>\$215 77</u>
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STREET DEPARTMENT — PAVING DIVISION. 119

Astor street, Massachusetts avenue to Parker street.

Labor and materials furnished by the City	\$46 67
Amount retained from P. McGovern for work done in 1899, under contract	199 08
	<u>\$245 75</u>

B street, from line of original low water to Congress street.

Labor and materials furnished by the City	<u>\$334 86</u>
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Belvidere street, Dalton to West Newton street.

Amount retained from Collins & Ham for work done in 1899, under contract	<u>\$80 98</u>
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Berkeley street, Boylston street to Columbus avenue.

Labor	<u>\$17 75</u>
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Blandford street, Commonwealth avenue to Boston and Albany Railroad.

Labor and materials furnished by the City	\$484 81
Amount retained from Boston and Albany Railroad Company for work done in 1899, under contract	4,680 00
	<u>\$5,164 81</u>

Boardman street, Saratoga street to Boston & Maine Railroad.

Labor	<u>\$31 25</u>
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Burt street, Washington to Ashmont street.

Labor and materials furnished by the City	\$88 77
Amount retained from Collins & Ham for work done in 1899 under contract	505 22
	<u>\$593 99</u>

Chester street, Commonwealth avenue to Brighton avenue.

Labor and materials furnished by the City	\$15 05
Amount retained from James Doherty & Co. for work done in 1899 under contract	57 98
	<u>\$72 98</u>

Chiswick road, Englewood avenue to Chestnut Hill avenue.

Labor	\$35 25
Amount paid to Collins & Ham	1,272 48
	<u>\$1,307 73</u>

Columbia road.

Labor, teaming and materials furnished by the City,	\$4,927 68
Amount paid to Simon J. Donovan, filling . . .	15,402 49
Amount paid to J. C. Coleman & Son, construction work	1,090 50
Amount paid to H. P. Nawn, construction work	702 20
	<u>\$22,122 82</u>

Cummington street, Blandford to Avon street.

Labor and materials furnished by the City . . .	\$996 24
Amount paid to Boston & Albany Railroad Company, filling	19,481 40
	<u>\$20,477 64</u>

Devon street, Blue Hill avenue to Columbia road.

Labor and materials furnished by the City . . .	\$71 05
Amount retained from John Connors for work done in 1899 under contract	188 74
	<u>\$259 79</u>

Dixfield street, Old Harbor to Covington street.

Labor	<u>\$26 25</u>
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Forest Hills street, Washington street to Glen road.

Labor	<u>\$55 00</u>
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Fowler street, Glenway to Greenwood street.

Labor	\$4 87
Amount retained from Collins & Ham for work done in 1899 under contract	70 52
	<u>\$75 39</u>

Francis street, Huntington to Brookline avenue.

Labor and materials furnished by the City . . .	\$23 01
Amount paid to James Doherty	201 99
	<u>\$225 00</u>

Hamilton street, Bowdoin street to Homes avenue.

Labor and materials furnished by the City . . .	<u>\$43 96</u>
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Harold street, Munroe street to Walnut avenue.

Stone	\$204 58
Amount retained from P. McGovern for work done in 1899 under contract	81 41
	<u>\$285 99</u>

STREET DEPARTMENT—PAVING DIVISION. 121

Hewins street, Columbia road to Erie street.

Stone	\$15 54
Amount retained from P. Doherty for work done in 1899 under contract	71 60
	<u>\$87 14</u>

Idaho street, from River street, 870 feet northerly.

Labor and materials furnished by the City	\$12 76
Amount retained from James McGovern for work done in 1899 under contract	102 94
	<u>\$115 70</u>

Ipswich street, Boylston road to Boylston street.

Labor and materials furnished by the City	\$710 19
Amount paid to D. H. Andrews, building bridge fence	2,625 00
Amount paid to Collins & Ham, construction work,	874 32
	<u>\$4,209 51</u>

Leeds street, Woodward street to Dorchester avenue.

Labor	\$18 50
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Maryland street, Savin Hill avenue to Bay street.

Amount retained from Philip Doherty for work done in 1899 under contract	\$64 53
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Middleton street, Norfolk street, about 600 feet northerly.

Stone	3 47
Amount retained from Philip Doherty for work done in 1899 under contract	75 11
	<u>\$78 58</u>

North Harvard street, Western avenue to Charles river.

Labor	\$27 75
Amount retained from George H. Wentworth & Co. for work done in 1899 under contract	384 60
	<u>\$412 35</u>

Orkney road, Sutherland road to Strathmore road.

Labor and materials furnished by the City	\$59 53
Amount retained from Daniel E. Lynch for work done in 1899 under contract	1,182 09
	<u>\$1,241 62</u>

Peterborough street, Audubon road to Fairhaven street.

Labor and materials furnished by the City . . .	\$9 69
Amount retained from James Doherty & Co. for work done in 1899 under contract . . .	236 72
	<u>\$246 41</u>

Peverell street, Sawyer avenue to Salcombe street.

Labor	\$32 00
Amount retained from Collins & Ham for work done in 1899 under contract	120 00
	<u>\$152 00</u>

Province court, from Province street.

Labor and materials furnished by the City . . .	\$259 38
Amount paid to Jones & Meehan construction work . . .	603 51
	<u>\$862 89</u>

St. Stephen street, from Bryant street 800 feet towards Gainsborough street.

Stone	\$6 76
Amount retained from James Doherty & Co. for work done in 1899 under contract	93 96
	<u>\$100 72</u>

Shirley street, Massachusetts to Norfolk avenue.

Labor and materials furnished by the City . . .	\$197 04
Amount returned from John F. Cullen for work done in 1899 under contract	566 17
	<u>\$763 21</u>

Spencer street, Wheatland to Talbot avenue.

Amount retained from James McGovern for work done in 1899, under contract	<u>\$79 06</u>
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Spencer street, Athelwold to Park street.

Labor and materials furnished by the City . . .	\$21 02
Amount retained from James McGovern for work done in 1899 under contract	41 40
	<u>\$62 42</u>

Spring street, Centre to Gardner street.

Labor, teaming and materials furnished by the City,	<u>\$827 07</u>
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STREET DEPARTMENT — PAVING DIVISION. 123

Stanley street, Quincy to Bellevue street.

Amount retained from James Doherty & Co. for work done in 1899 under contract	<u>\$63 03</u>
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Swett street, Massachusetts to Dorchester avenue.

Labor, teaming and materials furnished by the City	\$2,095 83
Amount paid to N. Y., N. H. & H. Railroad Com- pany, construction work	2,192 41
Amount paid to Jones & Meehan, construction work	<u>1,740 60</u>
	<u>\$6,028 84</u>

Thane street, Athelwold to Park street.

Amount retained from P. Doherty for work done in 1899 under contract	<u>\$27 64</u>
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Trinity place, Stuart to Stanhope street.

Labor and materials furnished by the City	\$419 84
Amount paid to Barber Asphalt Paving Company, asphalting	2,458 95
Amount paid to Frank Bachelder, paving, etc.	<u>921 28</u>
	<u>\$3,800 07</u>

Wensley street, Heath street, 720 feet westerly.

Labor and materials furnished by the City	\$91 46
Amount retained from Collins & Ham for work done in 1899 under contract	<u>416 13</u>
	<u>\$507 59</u>

West Selden street, Morton to Manchester street.

Labor and materials furnished by the City	\$1,191 22
Amount paid to James McGovern, construction work	<u>694 11</u>
	<u>\$1,885 33</u>

**Woodlawn street, Hyde Park avenue to Forest
Hills Cemetery.**

Labor	\$8 76
Amount retained from Thomas A. Dolan, for work done in 1899 under contract	<u>114 75</u>
	<u>\$123 51</u>

Worthington street, Longwood avenue to Back Bay Fens.

Labor and materials furnished by the City . . .	\$66 66
Amount retained from J. C. Coleman & Son for work done in 1899 under contract . . .	3,027 93
	<u>\$3,094 59</u>

Public alley 102, Marshall street to Creek square.

Labor	\$5 50
Advertising	3 50
	<u>\$9 00</u>

(Between Beacon and Marlborough Streets.)

Public alley 414, Massachusetts avenue to Hereford street.

Labor	<u>\$4 50</u>
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Public alley 415, Hereford to Gloucester street.

Labor	<u>\$4 50</u>
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Public alley 416, Gloucester to Fairfield street.

Labor	<u>\$16 63</u>
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Public alley 417, Fairfield to Exeter street.

Labor	<u>\$57 12</u>
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(Between Commonwealth Avenue and Marlborough Street.)

Public alley 421, Berkeley to Arlington street.

Labor	<u>\$47 50</u>
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Public alley 422, Arlington to Berkeley street.

Signs	<u>\$3 64</u>
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Public alley 423, Berkeley to Clarendon street.

Signs	<u>\$3 64</u>
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Public alley 424, Clarendon to Dartmouth street.

Signs	<u>\$3 64</u>
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Public alley 426, Exeter to Fairfield street.

Signs	<u>\$3 64</u>
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Public alley 427, Fairfield to Gloucester street.

Signs	<u>\$3 64</u>
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Public alley 428, Gloucester to Hereford street.

Signs	<u>\$3 64</u>
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Public alley 429, Hereford street to Massachusetts avenue.

Signs	<u>\$3 64</u>
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STREET DEPARTMENT — PAVING DIVISION. 125

(Between Commonwealth Avenue and Newbury Street.)

Public alley 430, Massachusetts avenue to Hereford street.

Labor	\$9 00
Advertising	2 38
	<hr/>
	\$11 38

Public alley 432, Gloucester to Fairfield street.

Labor, teaming and materials furnished by the City,	\$185 21
Amount paid to E. S. Fogerty, construction work,	841 35
	<hr/>
	\$1,026 56

Public alley 433, Fairfield to Exeter street.

Labor	\$9 00
Advertising	2 08
	<hr/>
	\$11 08

Public alley 434, Exeter to Dartmouth street.

Labor	\$9 00
Advertising	2 08
	<hr/>
	\$11 08

Public alley 435, Dartmouth to Clarendon street.

Labor	\$9 00
Advertising	2 07
	<hr/>
	\$11 07

Public alley 436, Clarendon to Berkeley street.

Labor	\$9 00
Advertising	2 07
	<hr/>
	\$11 07

(Between Newbury and Boylston Streets.)

Public alley 438, Arlington to Berkeley street.

Advertising	\$2 07
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Public alley 439, Clarendon to Dartmouth street.

Labor, teaming and materials furnished by the City,	\$147 32
Amount paid to E. S. Fogerty, construction work .	718 32
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	\$865 64

Public alley 440, Dartmouth to Exeter street.

Advertising	\$2 07
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Public alley 441, Exeter to Fairfield street.

Avertising	\$2 07
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Public alley 442, Fairfield to Gloucester street.

Advertising	<u>\$2 07</u>
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Public alley 443, Gloucester to Hereford street.

Advertising	<u>\$2 06</u>
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Public alley 444, Hereford street to Massachusetts avenue.

Advertising	<u>\$2 06</u>
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SUMMARY OF EXPENDITURES.

LAYING-OUT AND CONSTRUCTION OF HIGHWAYS.

TOTAL AMOUNT EXPENDED.

Aberdeen street	\$4,706 53
Alford street	97 50
Angell street	215 77
Astor street	245 75
B street	334 86
Belvidere street	80 98
Berkeley street	17 75
Blandford street	5,164 81
Boardman street	31 25
Burt street	593 99
Chester street	72 98
Chiswick road	1,307 73
Columbia road	22,122 82
Cummington street	20,477 64
Devon street	259 79
Dixfield street	26 25
Forest Hills street	55 00
Fowler street	75 39
Francis street	225 00
Hamilton street	43 96
Harold street	285 99
Hewins street	87 14
Idaho street	115 70
Ipswich street	4,209 51
Leeds street	18 50
Maryland street	64 53
Middleton street	78 58
N. Harvard street	412 35
Orkney road	1,241 62
Peterborough street	246 41
Peverell street	152 00
Province court	862 89
St. Stephen street	100 72
<i>Carried forward</i>	<u>\$64,031 69</u>

STREET DEPARTMENT — PAVING DIVISION. 127

<i>Brought forward</i>	\$64,031 69
Shirley street	763 21
Spencer street, Wheatland to Talbot avenue	79 06
Spencer street, Athelwold to Park street	62 42
Spring street	827 07
Stanley street	63 03
Swett street	6,028 84
Thane street	27 64
Trinity place	3,800 07
Wensley street	507 59
West Selden street	1,885 33
Woodlawn street	123 51
Worthington street	3,094 59
Public alley 102	9 00
Public alley 414	4 50
Public alley 415	4 50
Public alley 416	16 63
Public alley 417	57 12
Public alley 421	47 50
Public alley 422	3 64
Public alley 423	3 64
Public alley 424	3 64
Public alley 426	3 64
Public alley 427	3 64
Public alley 428	3 64
Public alley 429	3 64
Public alley 430	11 53
Public alley 432	1,026 56
Public alley 433	11 08
Public alley 434	11 08
Public alley 435	11 07
Public alley 436	11 07
Public alley 438	2 07
Public alley 439	865 64
Public alley 440	2 07
Public alley 441	2 07
Public alley 442	2 07
Public alley 443	2 06
Public alley 444	2 06
	<hr/>
	\$83,419 21

*LAYING-OUT AND CONSTRUCTION OF HIGHWAYS, EAST BOSTON.***Ashley street, Breed to Walley street.**

Labor, teaming and materials furnished by the City,	\$3,244 98
Amount paid to H. & D. Burnett, filling	2,342 91
Amount paid to Philip Doherty, construction work,	697 00
	<hr/>
	\$6,284 89

Bennington street, Chelsea street to Belle Isle Inlet.

Labor, teaming and materials furnished by the City,	\$8,194 16
Amount paid to Jones & Meehan, filling	48,383 15

\$56,577 31

Wordsworth street, Saratoga to Pope street.

Labor	\$69 87
Advertising	2 25

\$72 12

*SUMMARY OF EXPENDITURES.*LAYING-OUT AND CONSTRUCTION OF HIGHWAYS,
EAST BOSTON.

TOTAL AMOUNT EXPENDED.

Ashley street	\$6,284 89
Bennington street	56,577 31
Wordsworth street	72 12

\$62,934 32

LAYING-OUT AND CONSTRUCTION OF HIGHWAYS,
BRIGHTON.**Cambridge street, Brighton avenue to Washington street.**

Labor and materials furnished by the city	\$3,221 14
Amount paid to J. L. Bryne & Co., construction work	2,907 00
Amount paid to J. H. Sullivan, construction work,	2,030 99

\$8,159 13

Tremont street, Washington street to Newton line.

Labor and materials furnished by the City	\$2,095 80
Amount paid to William Scollans, construction work	1,545 30

\$3,641 10

*SUMMARY OF EXPENDITURES.*LAYING-OUT AND CONSTRUCTION OF HIGHWAYS,
BRIGHTON.

TOTAL AMOUNT EXPENDED.

Cambridge street	\$8,159 13
Tremont street	3,641 10

\$11,800 23

LAYING-OUT AND CONSTRUCTION OF HIGHWAYS,
DORCHESTER.**Alexander street**, southwardly over Oleander street.

Labor and materials, furnished by the City . . .	\$191 76
Amount paid to J. McGovern, construction work . .	307 35
	<u>\$499 11</u>

Annabel street, Columbia road to Sumner street.

Labor and materials furnished by the City . . .	\$2,033 49
Amount paid to J. McGovern, construction work . .	950 11
	<u>\$2,983 60</u>

Atherstone street, Fuller to Bailey street.

Advertising	\$3 38
Amount retained from Philip Doherty for work done in 1899 under contract	35 10
	<u>\$38 48</u>

Barry street, Quincy to Richfield street.

Labor, teaming and materials furnished by the City,	\$6,552 16
Amount paid to F. E. McCarthy Co., rock exca- vation	5,061 60
	<u>\$11,613 76</u>

Bird street, Columbia road to Hancock street.

Labor	<u>\$26 50</u>
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Boston street, Mt. Vernon street to to Columbia road.

Labor	\$83 50
Advertising	2 45
	<u>\$85 95</u>

Callender street, Tucker to Don street.

Labor and materials furnished by the City . . .	\$8,682 39
Amount paid to John F. Cullen, construction work,	3,861 33
	<u>\$12,543 72</u>

Conrad street, from Sumner street.

Labor	\$26 25
Advertising	2 45
	<u>\$28 70</u>

Draper street, Robinson to Bowdoin street.

Labor, teaming and materials furnished by the City,	<u>\$2,045 26</u>
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Edison Green, Dorchester avenue to Pond street.

Labor, teaming and materials furnished by the City,	\$7,311 07
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Amount paid to James McGovern, construction work	2,990 30
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	<u>\$10,301 37</u>
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Edwin street, Dorchester avenue to Shawmut Park.

Labor and materials furnished by the City . . .	\$147 07
---	----------

Amount retained from Philip Doherty for work done in 1899 under contract	221 09
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Amount paid to Patrick Lyons, artificial stone sidewalks	787 62
--	--------

	<u>\$1,155 78</u>
--	-------------------

Esmond street, Blue Hill avenue to Harvard street.

Labor and materials furnished by the City . . .	\$6,502 83
---	------------

Amount paid to T. F. Bradley, construction work .	3,011 59
---	----------

Amount paid to Warren Bros. Co., artificial stone sidewalks	2,581 84
---	----------

	<u>\$12,096 26</u>
--	--------------------

Florida street, King to Templeton street.

Labor and materials furnished by the City . . .	\$1,668 50
---	------------

Amount paid to Philip Doherty, construction work,	2,641 73
---	----------

Amount paid to Warren Bros. Co., artificial stone sidewalks	757 79
---	--------

Amount paid to Taylor, Carr & Andrews, artificial stone sidewalks	322 35
---	--------

	<u>\$5,390 37</u>
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Fowler street, Glenway to McLellan street.

Labor and materials furnished by the City . . .	\$1,749 23
---	------------

Amount paid to Booth & Co., construction work .	890 50
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	<u>\$2,639 73</u>
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Gibson street, Dorchester avenue to Adams street.

Labor	<u>\$62 18</u>
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Hancock street, Columbia road to Winter street.

Labor	<u>\$255 45</u>
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STREET DEPARTMENT — PAVING DIVISION. 131

Homes avenue, Bowdoin to Topliff street.

Labor and materials furnished by the City	\$4,053 22
Amount paid to Thomas F. Welch, construction work	2,106 06
	<u>\$6,159 28</u>

Lauriat avenue, Ballou avenue to Norfolk street.

Labor and materials furnished by the City	\$3,420 57
Amount paid to T. F. Bradley, construction work	2,422 04
Amount paid to W. A. Murtfeldt Co., artificial stone sidewalks	1,452 89
	<u>\$7,295 50</u>

Leonard street, Duncan to Adams street.

Labor, teaming and materials furnished by the City,	<u>\$249 10</u>
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Millet street, Park to Athelwold street.

Labor	\$12 00
Advertising	2 45
	<u>\$14 45</u>

Montague street, Ashmont to Roslin street.

Labor and materials furnished by the City	\$1,105 05
Amount paid to Collins & Ham, construction work,	797 15
Amount paid to Simpson Bros. Corporation, artificial stone sidewalks	759 94
	<u>\$2,662 14</u>

Moseley street, Crescent avenue to Columbia road.

Labor	\$68 98
Advertising	2 45
	<u>\$71 43</u>

Normandy street, from Lawrence avenue.

Labor	<u>\$19 00</u>
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Nottingham street, Bullard street to Bowdoin avenue.

Labor and materials furnished by the City	\$2,797 09
Amount paid to D. F. O'Connell, construction work	1,453 58
Amount paid to W. A. Murtfeldt Co., artificial stone sidewalks	861 90
	<u>\$5,112 57</u>

Rockford street, Dudley to Clifton street.

Labor and materials furnished by the City . . .	\$1,279 06
Amount paid to D. F. O'Connell, construction work	844 34
	<u>\$2,123 40</u>

Rozella street, Adams to Muzzy street.

Labor and materials furnished by the City . . .	\$708 70
Amount paid to T. F. Bradley, construction work, . . .	750 66
	<u>\$1,459 36</u>

Seaborn street, Centre to Kenwood street.

Labor and materials furnished by the City . . .	\$1,897 09
Amount paid to James Doherty, construction work, . . .	1,126 30
	<u>\$3,023 39</u>

Shafter street, Waterlow to Faxon street.

Labor and materials furnished by the City . . .	\$3,042 86
Amount paid to Philip Doherty, construction work, . . .	1,190 56
	<u>\$4,233 42</u>

Shepton street, Dorchester avenue to Florida street.

Labor, teaming and materials furnished by the City, . . .	<u>\$800 44</u>
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Spencer street, Athelwold to Harvard street.

Labor	\$12 00
Advertising	2 46
	<u>\$14 46</u>

Templeton street, Dorchester avenue to Adams street.

Labor	\$58 25
Advertising	2 46
	<u>\$60 71</u>

Thane street, Athelwold to School street.

Labor	\$23 25
Advertising	2 46
	<u>\$25 71</u>

STREET DEPARTMENT — PAVING DIVISION. 133

Van Winkle street, Dorchester avenue to Shawmut Branch Railroad.

Labor and materials furnished by the City . . .	\$3,559 18
Amount paid to Booth & Co., construction work .	1,679 32
Amount paid to Simpson Bros. Corporation, artificial stone sidewalks	1,158 79
	<u>\$6,397 29</u>

Wainwright street, Centre street to Welles avenue.

Labor and materials furnished by the City . . .	<u>\$111 15</u>
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Waldeck street, Melville avenue to Tonawanda street.

Labor and materials furnished by the City . . .	\$1,031 25
Amount retained from John F. Cullen, for work done in 1899, under contract	483 48
Amount paid to Taylor, Carr & Andrews, artificial stone sidewalks	509 75
	<u>\$2,024 48</u>

Warner street, Harvard to Park street.

Labor and materials furnished by the City . . .	\$3,777 27
Amount paid to T. F. Bradley, construction work,	1,926 58
Amount paid to Warren Bros. Company, artificial stone sidewalks	1,110 46
	<u>\$6,814 31</u>

Woodcliff street, eastwardly from Howard avenue.

Labor and materials furnished by the City . . .	\$1,205 33
Amount paid to Philip Doherty, construction work,	1,229 62
	<u>\$2,434 95</u>

SUMMARY OF EXPENDITURES.

LAYING-OUT AND CONSTRUCTION OF HIGHWAYS,
DORCHESTER.

TOTAL AMOUNT EXPENDED.

Alexander street	\$499 11
Annabel street	2,983 60
Atherstone street	38 48
	<u>\$3,521 19</u>
<i>Carried forward</i>	

<i>Brought forward</i>	\$3,521 19
Barry street	11,613 76
Bird street	26 50
Boston street	85 95
Callender street	12,543 72
Conrad street	28 70
Draper street	2,045 26
Edison Green	10,301 37
Edwin street	1,155 78
Esmond street	12,096 26
Florida street	5,390 37
Fowler street	2,639 73
Gibson street	62 13
Hancock street	255 45
Homes avenue	6,159 28
Lauriat avenue	7,295 50
Leonard street	249 10
Millet street	14 45
Montague street	2,662 14
Moseley street	71 43
Normandy street	19 00
Nottingham street	5,112 57
Rockford street	2,123 40
Rozella street	1,459 36
Seaborn street	3,023 39
Shafter street	4,233 42
Shepton street	800 44
Spencer street	14 46
Templeton street	60 71
Thane street	25 71
Van Winkle street	6,397 29
Wainwright street	111 15
Waldeck street	2,024 48
Warner street	6,814 31
Woodcliff street	2,434 95
	<hr/>
	\$112,872 71
	<hr/>

LAYING-OUT AND CONSTRUCTION OF HIGHWAYS,
ROXBURY AND WEST ROXBURY.

Amory street, School to Bragdon street.

Stone	\$5 39
Amount retained from Patrick McGovern, for work done in 1899, under contract	110 52
	<hr/>
	\$115 91
	<hr/>

STREET DEPARTMENT — PAVING DIVISION. 135

Bragdon street, Columbus avenue to Amory street.

Stone	\$3 96
Amount retained from Thomas A. Dolan, for work done in 1899, under contract	93 89
	<u>\$97 85</u>

Brookline avenue, Longwood avenue, entrance to Back Bay
Fens to the Riverway.

Labor, teaming and materials furnished by the City,	<u>\$2,590 20</u>
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Cardington street, from Cobden street.

Labor and materials furnished by the City	\$841 28
Amount paid to Philip Doherty, construction work,	350 03
	<u>\$1,191 31</u>

Carlow street, Albany to Chadwick street.

Labor	<u>\$24 75</u>
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Congreve street, South to Centre street

Labor and materials furnished by the City	\$3,603 97
Amount paid to William Finneran, construction work	1,750 74
	<u>\$5,354 71</u>

Corinth street, Washington to Brandon street.

Labor and materials furnished by the City	\$822 77
Amount paid to Collins & Ham, construction work	425 00
	<u>\$1,247 77</u>

Custer street, Woodman street to Arnold Arboretum.

Labor and materials furnished by the City	\$2,057 93
Amount paid to Philip Doherty, construction work,	1,011 33
	<u>\$3,069 26</u>

Dresden street, Boylston street to Spring Park
avenue.

Labor and materials furnished by the City	\$1,425 29
Amount paid to Thomas Minton, construction work,	500 59
	<u>\$1,925 88</u>

Dunford street, Cobden to Fenner street.

Labor and materials furnished by the City	\$888 55
Amount paid to Philip Doherty, construction work,	534 79
	<u>\$1,423 34</u>

Echo street, Columbus avenue to Centre street.

Labor and materials furnished by the City	\$774 77
Amount paid to James Doherty, construction work,	538 26
	<u>\$1,313 03</u>

Gainsborough street, St. Stephen to Hemenway street.

Labor	\$11 75
Advertising	5 24
	<u>\$16 99</u>

Hubbard street, Chestnut avenue to Lamartine street.

Labor and materials furnished by the City	\$43 77
Amount retained from Thomas Minton for work done in 1899 under contract	172 63
	<u>\$240 16</u>

Newburg street, Beech street to Belgrade avenue.

Labor and materials furnished by the City	\$6,029 60
Amount paid to James Doherty & Co., construction work	5,593 46
	<u>\$11,623 06</u>

Oakview terrace, from Centre street.

Labor and materials furnished by the City	\$4,892 77
Amount paid to Collins & Ham, construction work,	2,267 72
Amount paid to Patrick J. Lyons, artificial stone sidewalks	1,724 53
	<u>\$8,885 02</u>

Perkins street, Centre street to Jamaica way.

Labor	\$114 12
Advertising	5 03
	<u>\$119 15</u>

Pontiac street, Hillside to Tremont street.

Labor, teaming and materials furnished by the City,	<u>\$24,140 77</u>
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Queensberry street.

Teaming and materials furnished by the City	\$371 98
---	----------

Railroad street, Corey to Willow street.

Labor	\$27 75
Advertising	5 02
	<u>\$32 77</u>

Rowe street, Ashland to Seymour street.

Labor, teaming and materials furnished by the City,	\$1,328 95
Amount paid to Philip Doherty, construction work	278 63
	<u>\$1,607 58</u>

Seymour street, Canterbury street to Brown avenue.

Labor and materials furnished by the City	\$924 18
Amount paid to T. F. Welch, construction work	488 04
	<u>\$1,362 22</u>

South street, Jamaica street to Arborway.

Labor, teaming and materials furnished by the City,	<u>\$160 27</u>
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Stratford street, Anawan to Clement avenue.

Labor and materials furnished by the City	\$819 16
Amount paid to William L. Cahalan, artificial stone sidewalks	1,220 54
	<u>\$2,039 70</u>

Washington street, Morton to Tower street.

Labor, teaming and materials furnished by the City,	\$834 03
Amount paid to Jones & Meehan, construction work,	503 03
	<u>\$1,337 06</u>

Westbourne street, Cornell to Beech street.

Labor	<u>\$23 13</u>
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Public alley 901, Hemenway street to Fenway.

Labor	\$31 25
Advertising	5 23
	<u>\$36 48</u>

Public alley 905, west from Massachusetts avenue, between Commonwealth avenue and Marlborough street, and to Marlborough street.

Labor	\$5 25
Advertising	5 23
	<hr/>
	\$10 48
	<hr/>

SUMMARY OF EXPENDITURES.

LAYING-OUT AND CONSTRUCTION OF HIGHWAYS,
ROXBURY AND WEST ROXBURY.

TOTAL AMOUNT EXPENDED.

Amory street	\$115 91
Bragdon street	97 85
Brookline avenue	2,590 20
Cardington street	1,191 31
Carlow street	24 75
Congreve street	5,354 71
Corinth street	1,247 77
Custer street	3,069 26
Dresden street	1,925 88
Dunford street	1,423 34
Echo street	1,313 03
Gainsborough street	16 99
Hubbard street	216 40
Newburg street	11,623 06
Oakview terrace	8,885 02
Perkins street	119 15
Pontiac street	24,140 77
Queensberry street	371 98
Railroad street	32 77
Rowe street	1,607 58
Seymour street	1,362 22
South street	160 27
Stratford street	2,039 70
Washington street	1,337 06
Westbourne street	23 13
Public alley 901	36 48
Public alley 905	10 48
	<hr/>
	\$70,337 07
	<hr/>

NEW EDGESTONE.

The following tables show the amount of new edgestones set during the year, not including "323" streets:

CITY PROPER.

Wards 6, 7, 8, 9, 11, 12, 17 and 18, in whole or in part. (*Paving Districts 8, 9 and 10.*)

	Lin. feet.
Bay State road	407
Belvidere street	145
Endicott street	123
Federal and High streets	144
Massachusetts avenue	126
St. Germain street	115
St. Cecilia street	137
Hemenway street	138
Sundry streets in small quantities	209
	<hr/>
	1,544
	<hr/>

ROXBURY.

Wards 16, 17, 18, 19, 21 and 22, in whole or in part. (*Paving District No. 7.*)

	Lin. feet.
Batchelder and Burrell streets	141
Calumet street	2,112
Crawford street	119
Cunard street	134
Gore street	100
Humboldt avenue	120
Harold street	201
Halleck street	236
Homestead street	130
Harrishof street	366
Howland street	238
Kingsbury street	100
Munroe street	387
Massachusetts avenue	345
Otisfield street	947
Ruggles street	137
Roxbury street	102
Ruthven street	297
Sunderland street	203
Swett street	1,349
Tremont street	209
Waumbeck street	197
Sundry streets in small quantities	712
	<hr/>
	8,882
	<hr/>

EAST BOSTON.

Wards 1 and 2. (Paving District No. 2.)

	Lin. feet.
Condor street	418
Falcon street	108
Sundry streets in small quantities	90
	<hr/>
	616
	<hr/>

DORCHESTER.

Wards 16, 20 and 24, in whole or in part. (Paving District No. 6.)

	Lin. feet.
Blue Hill avenue	182
Cushing avenue and Jerome street	211
Dewey street	127
Euclid street	135
Erie and McLellan streets	191
Folsom and Robin Hood street	359
Massachusetts avenue	180
Newport street	291
Park street	714
Quincy street	4,947
Stanwood street	189
Seaver street	406
Washington street	170
Welles avenue	340
Willis street	343
Sundry streets in small quantities	848
	<hr/>
	9,638
	<hr/>

WEST ROXBURY.

Wards 22 and 23, in whole or in part. (Paving District No. 5.)

	Lin. feet.
Alveston street	192
Glen road	156
Maple street	166
Seymour street	100
	<hr/>
	614
	<hr/>

SOUTH BOSTON.

Wards 13, 14, 15 and 16, in whole or in part.

	Lin. feet.
East Sixth street	375
East Third street	156
Sundry streets in small quantities	198
	<hr/>
	729
	<hr/>

STREET DEPARTMENT — PAVING DIVISION. 141

CHARLESTOWN.

Wards 3, 4 and 5. (Paving District No. 3.)

	Lin. feet.
Sundry streets in small quantities	100

RECAPITULATION.

	Lin. feet.
City Proper	1,544
Roxbury	8,882
South Boston	729
East Boston	616
Dorchester	9,633
West Roxbury	614
Charlestown	100
	<u>22,118</u>

New Edgestones. (Not including "323" streets.)
First setting. Linear feet.

YEAR.	City Proper.	Roxbury.	South Boston.	East Boston.	Dorchester.	West Roxbury.	Brighton.	Charlestown.	Back Bay.	Total.
1891.....	8,236	22,603	11,724	4,131	18,138	4,617	2,032	2,227	.....	73,798
1892.....	9,222	25,506	9,631	11,238	36,859	9,970	9,001	2,804	.....	114,231
1893.....	1,118	14,979	4,372	1,969	10,587	4,795	3,981	.....	.....	41,801
1894.....	1,916	39,324	521	816	6,544	1,568	1,323	694	.....	52,706
1895.....	2,990	17,053	2,097	1,146	15,205	8,319	4,191	668	.....	51,669
1896.....	1,697	20,111	3,855	807	21,367	2,498	8,507	791	41,917	101,550
1897.....	5,097	14,241	2,311	1,691	37,205	5,228	1,086	.....	.....	66,859
1898.....	1,281	13,252	1,259	915	50,124	2,185	5,909	.....	.....	74,928
1899.....	1,410	8,134	308	2,715	6,818	2,265	439	111	.....	22,206
1900.....	1,544	8,882	729	616	9,633	614	.....	100	.....	22,118
Totals.....	34,511	184,175	36,807	26,047	212,480	42,059	36,469	7,395	41,917	621,800

NEW BRICK SIDEWALKS.

The following tables show the number of square yards of brick sidewalks laid during the year, not including "323" streets:

CITY PROPER.

*Wards 6, 7, 8, 9, 10, 11, 12, 17, and 18, in whole or in part.
(Paving Districts Nos. 8, 9, and 10.)*

	Sq. yds.
Atlantic avenue	309
Bay State road	122
Boylston street	167
Bosworth street	90
Beacon street	273
Dartmouth street	145
Falmouth street	102
Gainsborough street	209
Massachusetts avenue	238
Savoy street	200
Turner street	308
St. Germain street	215
Sundry streets in small quantities	480
	<hr/>
	<u>2,858</u>

ROXBURY.

*Wards 16, 17, 18, 19, 21, and 22, in whole or in part.
(Paving District, No. 7.)*

	Sq. yds.
Alleghany and Oscar streets	93
Albany street	124
Burrell and Batchelder streets	101
Calumet street	750
Columbus avenue	272
Cunard street	218
Halleck street	157
Huntington avenue	142
Hewes street	143
Heath street	254
Howland street	88
Marble street	435
Ruthven street	87
Ruggles street	181
Parker street	223
Sussex street	214
Walnut avenue	141
Washington street	236
Sundry streets in small quantities	1,140
	<hr/>
	<u>4,999</u>

DORCHESTER.

Wards 16, 20, and 24, in whole or in part. (Paving District, No. 6.)

	Sq. yds.
Ashmont street	385
Brookford and Rand streets	102
Dorchester avenue	248
Howard avenue	284
Quincy street	89
Savin Hill avenue	1,534
Stoughton street	381
Walnut street	150
Sundry streets in small quantities	910
	<hr/>
	4,033
	<hr/>

BRIGHTON.

Ward 25. (Paving District No. 5.)

	Sq. yds.
Oakland street	545
Nonantum street	328
	<hr/>
	873
	<hr/>

SOUTH BOSTON.

Wards 13, 14, 15 and 16, in whole or in part.

	Sq. yds.
A street	97
Bolton street	379
East Broadway	243
Old Harbor street	90
Sundry streets in small quantities	260
	<hr/>
	1,069
	<hr/>

WEST ROXBURY.

Wards 22 and 23, in whole or in part. (Paving District No. 5.)

	Sq. yds.
Alfred street	131
Chestnut avenue	194
Glen road	116
Greenough avenue	191
Seaverns avenue	186
School street	277
Walk Hill street	108
Sundry streets in small quantities	380
	<hr/>
	1,583
	<hr/>

EAST BOSTON.

Wards 1 and 2. (Paving District No. 2.)

	Sq. yds.
Condor street	180
Cottage street	250
Marion street	143
Meridian street	140
Paris street	178
Putnam street	125
Sundry streets in small quantities	460
	<hr/>
	1,476
	<hr/>

CHARLESTOWN.

Wards 3, 4 and 5. (Paving District No. 3.)

	Sq. yds.
Pearl street	150
Green street	133
Warren avenue	104
Sundry streets in small quantities	90
	<hr/>
	477
	<hr/>

RECAPITULATION.

	Sq. yds.
City Proper	2,858
Roxbury	4,999
South Boston	1,069
East Boston	1,476
Dorchester	4,033
Brighton	1,583
West Roxbury	873
Charlestown	477
	<hr/>
	17,368
	<hr/>

New Brick Sidewalks. (Not including "323" streets.)*First laying. Square yards.*

YEAR.	City Proper.	Roxbury.	South Boston.	East Boston.	Dorchester.	West Roxbury.	Brighton.	Charlestown.	Back Bay.	Total.
1891.....	3,881	9,098	3,628	2,176	1,478	967	377	120	.....	21,795
1892.....	10,423	20,231	4,484	12,847	10,462	2,905	1,068	3,451	.....	65,871
1893.....	964	5,912	751	2,197	2,412	350	.....	175	.....	12,761
1894.....	1,537	11,533	2,706	2,115	453	834	.....	437	.....	19,615
1895.....	4,103	6,246	1,946	1,151	2,146	1,734	2,908	408	.....	20,632
1896.....	1,044	15,897	2,314	681	2,616	1,542	.....	288	5,073	28,155
1897.....	17,287	21,596	13,460	16,125	2,995	1,855	2,128	14,454	.....	69,900
1898.....	10,121	13,783	4,487	6,453	4,723	1,225	216	4,633	.....	45,661
1899.....	5,424	8,316	4,084	3,503	2,610	1,448	.....	.....	.....	25,385
1900.....	2,858	4,999	1,069	1,476	4,033	1,583	873	477	.....	17,368
Totals.....	57,642	117,611	38,919	48,724	33,928	13,443	7,570	24,463	5,073	347,073

STREET CONSTRUCTION.

Number of new "323" streets constructed . . .	32
Number of new "323" streets partially constructed . .	16
Number of public alleys constructed	2

PAVING.

Details of New Work.

	Sq. yds.
Granite blocks on concrete base, pitch joints . . .	6,138
Granite blocks on concrete base, grout joints . . .	22,996
Granite blocks on gravel base, pitch joints . . .	1,079
Granite blocks on gravel base, grout joints . . .	453
Granite blocks on gravel base, gravel joints . . .	4,302

Total	<u>34,968</u>
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	Sq. yds.
Trinidad asphalt	12,978
Sicilian rock asphalt	11,525
	<u>24,503</u>

	Sq. yds.
Wooden blocks on concrete base	<u>1,367</u>

Macadam.

	Sq. yds.
Area of surface laid	<u>16,478</u>

Edgestone.

	Lin. ft.
Length of edgestones set	<u>38,545</u>

Gutters.

	Sq. yds.
Area of gutters laid	<u>7,149</u>

Sidewalks.

	Sq. yds.
Brick sidewalks laid	14,925
Crushed stone laid	4,650
Coal tar concrete laid	489
Total	<u>20,062</u>

Artificial stone sidewalks laid Sq. ft.
195,934

Crosswalks.

Area of flagging laid Sq. yds.
2,816

GENERAL REPAIRS.

**Summary of Work Done Under District Foremen.*

Number of streets repaired 162
 Length of streets repaired 42 miles.
 Area of macadam streets resurfaced . . . 551,869 sq. yds.
 Area of paving relaid 222,784 "
 Length of edgestones set and reset . . . 264,982 lin. ft.
 Area of brick sidewalks laid 147,863 sq. yds.
 Asphalt pavement repaired 3,790 "

SNOWFALL AND RAINFALL.

The following table showing the snowfall and rainfall since the present organization of the Department is of interest :

Snowfall (inches).

MONTH.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
November .....	.....	.....	3.0	0.4	6.7	.....	2.2	8.1	17.8	.1	.1
December	14.5	.....	2.0	18.5	13.5	5.2	8.6	7.8	7.7	.....	.8
January	14.7	12.0	14.6	15.0	13.9	9.5	18.2	16.3	6.1	8.3	7.8
February	13.7	11.5	35.3	21.6	8.8	9.5	10.9	11.5	30.7	.....	8.8
March	16.2	20.0	4.5	.....	3.8	14.5	3.3	6.0	9.3	.....	.....
April .....	.....	.....	7.9	8.5	0.5	0.2	.....	2.2	.....	.....	.....
Totals	59.1	43.5	67.3	64.0	47.2	38.9	43.2	51.9	71.6	8.4	17.5

Snow Account.

1891-92 . . . \$102,410 86	1896-97 . . . \$68,741 07
1892-93 . . . 60,190 20	1897-98 . . . 116,224 20
1893-94 . . . 151,943 33	1898-99 . . . 172,963 48
1894-95 . . . 78,381 71	1899-1900 . . . 154,625 18
1895-96 . . . 84,809 08	1900-1901 . . . 29,138 38

Average for ten years, \$101,942.75

*The quantities given in this schedule are in addition to and are not included in the foregoing tables.

Rainfall (inches).

	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
January	3.40	3.85	2.26	3.01	3.79	2.25	3.16	3.50	4.19	4.20
February	2.53	.36	4.82	3.15	1.11	3.94	2.12	4.81	3.03	6.83
March	2.70	1.68	2.80	1.01	2.72	5.41	2.79	1.82	5.95	4.60
April	1.68	.93	3.13	3.78	3.65	1.56	3.17	6.31	1.29	1.90
May	1.56	5.15	5.23	4.12	2.71	1.68	4.00	4.33	.81	5.07
June	3.06	3.05	2.20	.80	1.73	2.71	4.46	1.60	2.86	1.85
July	3.73	2.56	1.72	3.01	2.98	2.90	4.22	4.42	2.52	2.69
August	3.87	4.87	6.46	3.03	3.24	2.15	3.95	6.98	2.52	2.46
September	2.29	1.90	1.59	2.14	1.53	6.40	2.38	1.93	5.09	4.62
October	5.56	2.31	2.94	5.11	6.19	3.15	.41	7.17	2.40	3.41
November	2.20	2.94	1.83	3.10	8.07	3.70	6.19	5.32	2.51	4.17
December	3.50	.87	5.16	4.28	2.45	1.70	3.92	2.19	1.52	2.25
Totals	36.08	30.47	40.14	36.54	40.17	37.55	40.77	49.78	34.69	44.05

In this rainfall is included the precipitation during the winter months, which equals .1 of an inch to 1 inch of snowfall.

Crushed Stone, Ballast and Telford.*Output of Stone from City Crushers.*

	Crushed Stone. Tons.	Telford. Tons.
Bleller's ledge	2,521	
Centre street crusher	17,027	
Chestnut Hill avenue crusher	4,616	
Codman street crusher	13,975	
Commonwealth avenue crusher	8,283	
Dimock street crusher	26,204	
Kenney street crusher	6,177	
Mosman crusher	33,132	
Rosseter street crusher	17,073	734
Totals	128,990	734

The records of the Street Commissioners for the year 1900 show the following results:

Streets laid out or extended	8,415.23	feet
Streets widened and relocated	56,078	square feet
Streets discontinued	11	square feet
Increase in mileage	1.593	miles

Streets Laid Out, Extended, Widened or Relocated and Ordered to be Constructed.

Date.	Street.	Location.	Length Lin. ft.
Jan. 22, 1901..	†Ashby st.....	From Commonwealth ave. to Bay State road	297.57
Jan. 22, 1901..	†Bay State road..	From Granby st. to Chilmark st.....	1,415.35
Dec. 27, 1900..	Berkeley st....	From Boylston st. to Columbus ave....	
Dec. 31, 1900..	Boardman st....	Formerly Chelsea ave., from Saratoga st. to B. & M. R. R.....	2,540.00
Jan. 23, 1900..	†Chilmark st.....	From Commonwealth ave. to Bay State road.....	255.44
Dec. 31, 1900..	Robinwood ave.	From Centre st. to Hazel st.....	1,783.12
June 8, 1900..	Trinity pl.....	From Stuart st. to Stanhope st.....	259.68
Jan. 26, 1900..	*Walk Hill st....	From South st. to Washington st.....	9,481.00

Streets Laid Out, Extended, Widened or Relocated.

Date.	Street.	Location.	Length. Lin. ft.
Dec. 8, 1900..	*Beacon st.	From Chestnut Hill ave. to Reservoir lane	5,750.00
July 24, 1900..	Congress sq.	South and East from the part connecting Devonshire st. with Congress st...	186.50
July 13, 1900..	Denny st.	From Savin Hill ave.....	278.81
Aug. 7, 1900..	*Genesee st.....	South side, near Albany st.	40.00
May 31, 1900..	Hale st.	Formerly Crescent pl., from Green st...	294.00
Jan. 22, 1901..	Hutchings st. ...	From Humboldt ave. to Elm Hill ave. ...	1,104.76
May 22, 1900..	*Portland st.....	At Sudbury st.....	11.00
Jan. 5, 1901..	*Portland st.....	Opposite Market st.....	26.00
May 31, 1900..	*Washington st...	Near Milton boundary line.....	174.00

STREETS MADE PUBLIC HIGHWAYS BY DECREE OF COURT.

	Lin. ft.
Albert street	305
C street, Fargo to Congress street	386
Columbia avenue (laid out but not built)	6,523
D street, Fargo to Summer street	294
Dorchester avenue, Congress to Summer street	301
Fargo street, C to D street	550
Kemp street	495
Melcher street, A to Summer street	652
Power street	399
Summer street, Dorchester avenue to L-street bridge	4,954

* Square feet taken.

† Built by private parties.

NAMES OF STREETS CHANGED.

February 21, 1900. — Dove street, now Dresser street, South Boston.

February 21, 1900. — Peter Parley street, now Peter Parley road, West Roxbury.

February 26, 1900. — Bothnia street, now St. Cecilia street, City proper.

February 26, 1900. — Brandon street, now Robert street, West Roxbury.

February 26, 1900. — Shamrock street, now Kimball street, Dorchester.

OPEN SPACES OR SQUARES NAMED.

May 4, 1900. — Junction of Talbot avenue, Washington, Norfolk and Centre streets, Dorchester, now Codman square.

June 21, 1900. — Junction of Washington street, Columbus avenue and Atherton street, Roxbury, now Egleston square.

January 5, 1901. — Junction of Prescott, Chelsea and Bennington streets, East Boston, now Day square.

PROPERTY IN CHARGE OF THE DEPUTY SUPERINTENDENT OF PAVING DIVISION.

Buildings and wharf on Albany street, opposite Sharon street. The building is of brick and wood, and covers some 8,000 square feet of land, and is divided into a shed for storage, blacksmith's and carpenter's shops, tool-room and stable. The total contents of the lot, including wharf and building, are 63,180 square feet.

Fort Hill Wharf, containing 21,054 square feet, placed in charge of the Paving Department May 18, 1874, to be used for the landing and storage of paving blocks and gravel until such time as said wharf shall be wanted for the extension of Oliver street. The greater part of said wharf is occupied by the Sanitary Division as a garbage dump, and the building thereon is leased to a tenant.

Ledge lot on Washington street, corner Dimock street, Roxbury, containing 134,671 square feet. Upon this lot are buildings containing a steam-engine and stone-crusher.

Highland street stable lot. Upon this lot is a large brick stable, erected in 1873, and occupied by the Sanitary and Paving Divisions; also a brick building used as a blacksmith's shop, and a shed for the storage of tools, etc.

Ledge lot on Codman street, Dorchester, containing 299,000 square feet, was purchased in 1870. Upon this lot is a shed containing a steam-engine and stone-crusher, also a stable and tool-house.

On the Almshouse lot, Hancock street, Dorchester, there are two stables, also a shed and tool-house.

Ledge lot on Magnolia street and Bird place, Dorchester, containing 81,068 square feet. This lot was purchased by the town of Dorchester in 1867.

Downer avenue lot, Dorchester, containing 35,300 square feet.

On Child street, West Roxbury, a lot of land containing 43,024 square feet, upon which are a stable and shed, blacksmith's shop, and tool-house.

Gravel lot in the town of Milton, on Brush Hill road, containing 64,523 square feet, leased May 13, 1843, by the town of Dorchester for 999 years; also lot of land adjoining, containing about 30,000 square feet, owned by the City of Boston.

Gravel lot on Morton street, Ward 23, containing about one-third of an acre, purchased by the town of West Roxbury in 1870, used for storage purposes.

Ledge and gravel lot, rear of Union street, containing about 37,000 square feet, purchased by the town of Brighton. This lot is at present leased.

Ledge lot on Chestnut Hill avenue, Brighton, containing about thirteen acres, upon which are an office, engine-house, stable and crusher plant.

On Medford street, Charlestown, a wharf lot, foot of Elm street, containing 8,000 feet, upon which are sheds, office, stable, etc.

In South Boston, corner of H and Ninth streets, stable, carriage-house, shed, tool-house and office on leased land.

On Hereford street, a yard with shed, tool-house and office.

Wharf, known as Atkin's Wharf, 521 Commercial street, purchased in 1887 for \$24,000, containing 22,553 square feet, having on it an office and stable, also Slate wharf adjoining on lease.

On Centre street, West Roxbury, buildings containing engines, stone-crushers, tools, etc., on leased land.

On Rosseter street, Dorchester, buildings containing engines, stone-crushers, tools, etc., on leased land.

On Revere street, wharf for storing paving blocks, etc.

Wharf on Chelsea street, East Boston, containing 61,000 square feet, with buildings purchased in 1897 for \$15,000.

Wharf on East Eagle street, East Boston, known as Glendon wharf, used jointly with Sanitary, Sewer and Street Cleaning Divisions. Upon this lot are sheds, stable and offices on leased land.

On Montebello and Ifley roads, West Roxbury, buildings containing engines, stone-crushers, tools, etc., on leased land.

On Kenney street, Roxbury, buildings containing engines, stone-crushers, tools, etc., on leased land.

Permits have been issued from this office during the year ending January 31, 1901, as follows:

STREET DEPARTMENT — PAVING DIVISION. 151

STREET OPENINGS.

	Permits.	Feet.
American Telegraph and Telephone Company,	12	108
Automatic Fire Alarm Company.....	2	880
Boston Cemetery Department.....	1	50
Boston Engineering Department.....	3	250
Boston Fire Department.....	56	5,665
Boston Lamp Department.....	567	7,131
Boston Park Department.....	2	90
Boston Police Department.....	34	4,740
Boston Public Building Department.....	1	100
Boston Public Grounds Department.....	27	175
Boston Street Department (Sewer Division)...	781	51,710
Boston Water Department.....	2,767	130,746
Boston Water Department (Income Division)...	47	649
Boston & Albany Railroad Company.....	2	100
Boston & Maine Railroad Company.....	27	897
Boston Electric Light Company.....	336	29,962
Boston Elevated Railway Company.....	411	183,590
Boston Gas Light Company.....	559	52,740
Boston Low Tension Wire Association.....	10	1,605
Brookline Gas Light Company.....	346	41,684
Charlestown Gas and Electric Company.....	55	3,920
Church Green Light and Power Company....	1	8
Dorchester Gas Light Company.....	332	32,972
Edison Electric Illuminating Company.....	510	43,395
Eastern Cold Storage Company.....	5	106
East Boston Gas Company.....	83	3,661
Jamaica Plain Gas Company.....	115	5,442
Lynn & Boston Railroad Company.....	11	3,080
Massachusetts Pipe Line Company.....	6	6,830
Metropolitan Water Commission.....	3	215
Metropolitan Sewerage Commission.....	4	410
Metropolitan Contracting Company.....	25	27,210
Massachusetts Telephone and Telegraph Com- pany.....	78	11,378
New England Telephone and Telegraph Com- pany.....	477	99,601
New York, New Haven & Hartford Railroad Company.....	11	1,520
Postal Telegraph Cable Company.....	32	1,515
Quincy & Boston Street Railway Company...	1	100
Quincy Market Cold Storage Company.....	31	923
Roxbury Gas Light Company.....	331	27,892
South Boston Gas Light Company.....	177	7,986
Simpson Bros. Corporation.....	71	19,038
Standard Oil Company.....	14	145
Suburban Light and Power Company.....	1	10
Town of Brookline.....	1	20
Union Freight Railroad Company.....	11	1,775
West Roxbury & Roslindale Street Railway Company.....	15	608
Western Union Telegraph Company.....	11	1,715
Miscellaneous.....	3,179	198,447
Emergency Permits Class A.....	1,878	.....
Emergency Permits returned 1,423; estimated length in feet.....	.....	8,538
Total.....	13,460	1,021,332

Making a total length of openings of about 193½ miles.

Permits other than for street openings have been granted as follows:

Advertising by man wearing hat and coat	9
Cleaning snow from roofs	85
Dumping snow in public alleys	212
Driving cattle	41
Erecting, removing and repairing awnings	4,420
Erecting and repairing buildings	6,976
Feeding horses on the street	416
Moving buildings	44
Loading and unloading goods	514
Pedlers, two classes	1,471
Placing signs flat on buildings	2,405
Painting signs or notices on obstruction fences	21
Raising and lowering safes, machinery, etc.	556
Selling from areas	82
Selling from doors and windows	157
Special permits for various purposes	117
Selling from farmers' wagon-stands	625
Special permits for June 17 and July 4	125
Extension of permits	600
Emergency permits, class B	225

Permits to Project Electric Lamps and Signs as Follows:

Boston Electric Light Company	72
Edison Electric Illuminating Company	60
E. Howard Clock Company	1
Kitson Hydro Carbon Light and Heating Company	94
Suburban Light and Power Company	18
Washington Incandescent Company	18
Total	<u>19,364</u>
Total number of permits for street openings	13,460
Total number of permits for all other purposes	<u>19,364</u>
Grand total of permits issued	<u>32,824</u>

At the close of business on June 14 last all bonds with personal sureties were retired, and applicants for permits were notified that future bonds must be guaranteed by some one of the surety companies authorized to do business in the State of Massachusetts.

There are now on file 988 bonds, which are so guaranteed, and the result has been very satisfactory.

Under the old system, in many cases when it has been necessary to call upon the personal sureties to assume liability for damages caused by parties holding permits, it has been found that the sureties were worthless, as property which they possessed when signing such bonds had been transferred, and could not be held.

Over two hundred letters have been sent to storekeepers and house-holders in connection with selling fruit, etc., from doorways, windows and areas, and special care has been used in granting permits relating to that class of business.

There have been 14,037 notices sent to the various foremen during the year, directing them to repair defects in the public

streets which had been reported by the police and others; also, 3,581 letters and notices to private parties, departments and corporations to repair the streets where they had received permits for openings, and the resurfacing had been improperly done, and to owners of estates where coal-holes or sidewalk lights were defective.

Notices have been sent to Departments, corporations, and owners of abutting estates on streets where improvements were about to be made in 2,265 instances.

Four hundred and forty-two notices have been sent to Departments and corporations at the request of the Chief Engineer of the Paving Division, calling for various changes on account of street improvements.

INSPECTORS.

Inspectors connected with this office have been engaged in inspecting locations where permits had been granted for street openings or occupancy, and, where defects were found, the parties so opening or occupying have been notified and required to place the street complained of in satisfactory condition.

Inspectors have been detailed to serve with the various corporations at all times while their work has been in progress, and a report has been regularly received from them, in writing, giving the particulars of the work and its condition.

STREET NUMBERING.

During the year 106 whole streets were numbered or renumbered, 984 parts of streets were numbered, and 6,741 metallic figures were supplied.

The following table explains the work done by districts, and in addition gives the number of estates numbered, and the number of changes made necessary by renumbering or other cause.

	Whole streets numbered.	Whole streets re-numbered.	Parts of streets numbered.	Estates numbered.	Estates on which numbers were changed.	Metallic figures supplied.	Total streets numbered and re-numbered.
East Boston.....	1	4	69	123	34	341	5
Charlestown.....	2	1	18	75	12	127	3
City Proper.....	3	10	127	402	117	970	13
South Boston.....	3	10	43	229	143	698	13
Dorchester.....	5	17	322	888	321	2,018	22
Roxbury.....	4	12	176	563	143	1,319	16
West Roxbury.....	11	16	127	250	40	644	27
Brighton.....	7	.....	102	246	20	624	7
Totals.....	36	70	984	2,776	830	6,741	106

APPENDIX D.

REPORT OF THE DEPUTY SUPERINTENDENT
OF THE SANITARY DIVISION.

ROOMS 917-920 TREMONT BUILDING,
BOSTON, February 1, 1901.

B. T. WHEELER, ESQ.,

Superintendent of Streets:

DEAR SIR, — I respectfully submit the annual report of the expenditures, income and operation of the Sanitary Division of the Street Department during the financial year ending January 31, 1901.

The work of this Division consists principally in the removal of house offal, waste and rubbish, ashes made in the process of heating and cooking, and engine or power ashes.

The serious problem that confronted this Division at the opening of the year was the economical adaptation of its working force to meet the requirements of the eight-hour law, passed by the citizens at the election in December, 1899.

The loss of labor caused by the operation of this law on the basis of the number of men employed is approximately equal to 20,000 days' work.

In order to adjust the teaming labor so as to occasion the least waste of time and the most efficient prosecution of the work, an increase was made in the force of hostlers at the West yard. Teamsters were entirely relieved of the care of their horses and harnesses while at the stables, thus enabling them to give a full day to the work of collection.

The success of this experiment warranted its extension, and it was adopted at the Roxbury yard with the same satisfactory results. The further extension of the plan throughout the Division is now contemplated.

The securing of suitable dumping-places presents a problem difficult of solution, to which attention has been called in former reports. In all the more thickly settled sections of the City, the dumping-places are so remote from points of collection that the expense of hauling is vastly

increased, and this becomes equally true in the rapidly growing outlying districts. This is particularly applicable to the Charlestown District, where it is imperative that some relief be given, and it is therefore recommended that a scow be located near Charles River avenue to receive material collected in Charlestown and portions of the North and West Ends.

The objection of householders to gathering paper and other light waste into a separate receptacle, or to the so-called "third separation," has gradually diminished as the public has become acquainted with the plan and purpose.

The success of this separation is shown by the great increase in the quantity delivered to the City Refuse Utilization Company's plant, as compared with the previous year. The average weight per load in 1899 was 796 pounds; the average weight per load in 1900 was 1,045; increase per load, 249 pounds. The aggregate removal in 1899 was 6,669 tons, and in 1900, 8,581 tons—an increase of 1,912 tons.

The contract system now in operation in some of the suburban districts is unsatisfactory to the residents, and a continued source of annoyance to the Division; the substitution of labor under direct control of the Division is desirable, and is strongly recommended.

The extreme age of one of the Barney dumping boats necessitated the purchase of a new boat, the cost of which, \$17,500, was paid from the maintenance appropriation for the year. All three boats are now seaworthy and in excellent repair. The docks have been dredged to a depth sufficient to allow them to enter and depart at all tides.

Considerable expense has been incurred the past year in the employment of outside tow-boats, the Department boat not being always available.

The repair-shops at the Albany street yard have been improved, and they are now second to none of their kind. Early in the year the repair-shops of the Street Cleaning Division were merged into those of this Division, and many radical changes were made.

Both the blacksmith and wheelwright shops were supplied with all necessary modern machinery, and operated by an electric motor of fifteen horse-power. At the same time the nine forges of the blacksmith and horseshoeing shops were connected with a Sturtevant electric motor and fan. In short, the shops have been modernized, and are now thoroughly equipped for the work of repairing and constructing the rolling stock of the Street Department.

Commodious and convenient quarters on East Eagle street, East Boston, have replaced the location at Chelsea street, temporarily provided upon the substitution of Department force for contract labor in the collection of ashes in this section.

The stables and sheds on North Grove street are wholly inadequate to the increasing demands of the West District. Most of the carts and wagons are without covering, and shelter for many horses has of necessity been provided in old, unsanitary sheds, remote from the stable, while the stable walls are so bulged in places as to raise a question concerning their safety.

Apart from this, the several stables and sheds in charge of the Division have been kept in good repair.

The rolling stock has been put in excellent condition. Several large paper wagons have been added for conveying paper from points remote from the place of deposit.

Many horses are required to replace those nearly or quite unfit for service. Sixteen have been added during the year.

Respectfully yours,

C. A. YOUNG,

Deputy Superintendent.

FINANCIAL STATEMENT.

Amount of appropriation	\$600,000 00
Transferred from Bridge Division	4,238 30
Transferred from outside Divisions and Department appropriations	5,149 70
Returned on Dorchester contract	276 67

Total amount of appropriation	<u>\$609,664 67</u>
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The total expenditures of the Division, including work done for other Divisions and Departments, and paid for by them was	\$649,745 59
Less amounts repaid	45,230 62

\$604,514 97

Transferred from other Divisions and Departments appropriations	5,149 70
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Net cost of maintenance Sanitary Division	<u>\$609,664 67</u>
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STREET DEPARTMENT—SANITARY DIVISION. 157

TOTAL COST OF REMOVAL OF HOUSE DIRT, ASHES, WASTE,
RUBBISH AND HOUSE OFFAL.

Salaries, Deputy Superintendent, Clerks and Foremen	\$17,505 50
Office supplies and expenses	4,866 86

Ashes, Waste and Rubbish' Account.

Expended for labor, as per pay-rolls,	\$178,160 36	
Expended for hired teams, per pay-rolls	53,142 50	
Expended for disposition of ashes	16,702 02	
Expended for disposition of waste and rubbish	13,171 53	
Expended for stock, as per ledger accounts	56,432 04	
Expended on contract, part of West Roxbury	2,450 00	
Expended on contracts, Dorchester	9,802 90	
	<hr/>	329,861 35

House Offal Account.

Expended for labor, as per pay-rolls,	\$104,048 31	
Expended for hired teams as per pay-rolls	5,465 00	
Expended for disposition of offal,	56,610 10	
Expended for stock, etc., as per ledger	34,023 22	
Expended on contract, East Boston,	8,000 00	
Expended on contract, Brighton	3,000 00	
Expended on contract, part of West Roxbury	1,800 00	
Expended on contract, Dorchester	6,323 60	
	<hr/>	219,270 23

*Construction, Repair and Horseshoeing Shops
Account.*

Foreman		1,338 66
Expended for labor	\$30,893 07	
Expended for stock	21,946 28	
	<hr/>	52,839 35
Allowed time for holidays	\$23,451 14	
<i>Carried forward</i>	\$23,451 14	\$625,681 95

<i>Brought forward</i>	\$23,451 14	\$625,681 95
Medical attendance and allowed time for injured men	612 50	
	<hr/>	24,063 64

Total expenditures of the Sanitary Division, for
year ending January 31, 1901 \$649,745 59
Average price per cart load to remove and dispose
of waste material, \$1.39.

REVENUE RECEIVED FROM OUTSIDE DIVISIONS AND
DEPARTMENTS FOR BOARD AND CARE OF
HORSES, RENT, USE OF DUMPING BOATS,
SHOEING, AND FOR REPAIRING VEHICLES, ETC.

Paving Division	\$12,676 21	
Sewer Division	5,738 04	
Street Cleaning Division	22,930 13	
Street Watering Division	714 68	
Bridge Division	780 06	
Public Buildings Department, Repairs Division	15 25	
County of Suffolk	2,363 25	
Board of Health	13 00	
	<hr/>	45,230 62
		\$604,514 97
Transferred from Outside Division and Department appropriations		5,149 70

Net cost of Sanitary Division from February 1,
1900, to February 1, 1901. \$609,664 67

Income.

Amounts of moneys deposited and bills presented to the City
Collector for collection for material sold and work performed by
the Sanitary Division of the Street Department during the year
ending January 31, 1901.

MONEYS DEPOSITED WITH CITY COLLECTOR.

From letting of scow privileges \$1,906 35

BILLS DEPOSITED WITH CITY COLLECTOR.

For the removal of engine ashes	\$11,499 74	
For the sale of manure	523 72	
For dumping refuse	13 65	
For renting portion of Fort Hill Wharf	1,341 66	
	<hr/>	\$13,378 77

Items of Expenditures and Revenue.

ITEMS.	Total Amount Expended.	Amount Paid by other Divisions.	Amount Charged to Sanitary Division.
Salaries of Deputy Superin- tendent and clerks.....	\$9,761 53		\$9,761 53
Salaries of foremen.....	9,082 63	590 10	8,492 53
For labor in removing house- dirt and ashes.....	125,039 35	14,889 05	110,750 30
For labor, sub-foremen and inspectors, collecting house- dirt and ashes.....	15,258 58	1,447 49	13,811 09
For extra teams, collecting house-dirt and ashes.....	52,565 00		52,565 00
For collecting house-dirt and ashes in West Roxbury, Dorchester, north of Park, School and Harvard sts., and Dorchester, south of Park, School and Harvard sts.	12,252 90		12,252 90
For disposition of ashes.....	16,702 02	1,156 80	15,545 22
For ash stock, consisting of shovels, cart covers, etc....	369 85		369 85
For labor, removing waste and rubbish	21,114 50	3,479 33	17,635 17
For labor, sub-foremen and inspectors on waste and rubbish.....	2,324 50	265 50	2,059 00
For hired teams on waste and rubbish.....	577 50		577 50
For disposition of waste and rubbish.....	13,171 53		13,171 53
For waste and rubbish stock.	14 20		14 20
For labor, removing house offal.....	77,531 29	9,242 05	68,289 24
For labor, sub-foremen and inspectors, removing house offal.....	8,969 42	479 28	8,490 14
For extra teams, removing house offal.....	5,465 00		5,465 00
For removing house offal in East Boston, Brighton, West Roxbury and Dorchester..	19,123 60		19,123 60
For offal stock, consisting of wagons, buckets, etc.....	799 30		799 30
For disposition of offal.....	56,610 10	34 12	56,575 98
For labor of men employed in stables and yards.....	28,436 29	2,853 71	25,582 58
For allowed time, holidays...	23,451 14	3,211 43	20,239 71
For grain.....	18,449 23	1,637 42	16,811 81
For hay and straw.....	16,250 92	788 64	15,462 28
For medical attendance and allowed time on account of injured men.....	612 50	6 00	606 50
<i>Carried forward.....</i>	\$534,532 88	\$40,080 92	\$494,451 96

Items of Expenditures.—*Concluded.*

ITEMS.	Total Amount Expended.	Amount Paid by other Divisions.	Amount Charged to Sanitary Division.
<i>Brought forward</i>	\$534,532 88	\$40,080 92	\$494,451 96
For horses.....	5,225 00	.....	5,225 00
For veterinary services and medicines.....	2,215 12	.....	2,215 12
For stable and yard furnish- ings, consisting of curry- combs, sponges, brushes, etc.....	1,660 26	.....	1,660 26
For outside board and care of horses.....	797 86	.....	797 86
For outside horseshoeing, blacksmith work, wheel- wright work, harness work and painting.....	2,710 59	.....	2,710 59
For labor, stock and tools, blacksmith shop.....	15,838 09	.....	15,838 09
For labor, stock, etc., wheel- wright shop.....	14,444 76	.....	14,444 76
For labor, stock, etc., paint shop.....	8,412 84	.....	8,412 84
For labor, stock, etc., harness shop.....	7,575 98	.....	7,575 98
For labor, stock, etc., plumb- ing and gasfitting.....	119 44	.....	119 44
For labor, stock, etc., horse- shoeing shop, South Yard..	3,532 86	.....	3,532 86
For labor, stock, etc., horse- shoeing shop, West Yard..	2,915 42	.....	2,915 42
For dumping boats, labor, stock, etc.....	38,045 58	.....	38,045 58
For repairs on stables and sheds.....	1,728 14	.....	1,728 14
For fuel.....	780 73	.....	780 73
For gas.....	772 32	.....	772 32
For electric light.....	564 44	.....	564 44
For printing.....	1,746 69	.....	1,746 69
For stationery.....	853 01	.....	853 01
For advertising.....	395 15	.....	395 15
For rents.....	1,412 47	.....	1,412 47
For tolls and fares.....	200 00	.....	200 00
For telephones.....	923 92	.....	923 92
For office items and expenses	426 93	.....	426 93
For damages caused by City teams.....	73 89	.....	73 89
For incidentals.....	1,841 22	.....	1,841 22
	\$649,745 59	\$40,080 92	\$609,664 67
Transfers from outside Divi- sion and Department appro- priations for work per- formed for them.....	.....	5,149 70	
		\$45,230 62	

STREET DEPARTMENT—SANITARY DIVISION. 161

REMOVAL OF HOUSE DIRT, ASHES, WASTE AND RUBBISH, AND
HOUSE OFFAL.

This work shows a constant increase from year to year, as will be seen in the following tables, and is an indication of the actual growth of the City.

Previous to the year 1897, each load of ashes was equivalent to 44 cubic feet. During 1897 sideboards were attached to ash carts, increasing capacity of cart to 54 cubic feet.

Prior to 1899, waste and rubbish were not separated from the ashes. About 150,000 barrels of engine ashes, the residuum of coal used for power, were collected and removed.

On offal, each load is equivalent to 56 cubic feet; weight approximately $1\frac{1}{2}$ tons on an average.

Many small dead animals—dogs, cats, etc., were removed, and a constant increase in this branch of the service is shown.

Force Employed on House Dirt, Ashes and Waste and Rubbish.

CITY FORCE.	No.	Hired Teams.	CONTRACTORS' TEAMS.			Total.
			North Dorchester.	South Dorchester.	West Roxbury.	
Sub-foremen.....	7	.....	.....	.....	.....	7
Inspectors	16	.....	.....	.....	.....	16
Tallymen	3	.....	.....	.....	.....	3
Teamsters	125	36	5	3	2	171
Helpers	131	37	5	4	3	180
Dumpers	26	.....	.....	.....	.....	26
Totals	308	73	10	7	5	403

Amount of House Dirt and Ashes Removed.

YEAR.		No. of loads of 44 cubic feet.
1896.....	House dirt and ashes, including waste and rubbish...	363,975
1897.....	" " " " " " " "	389,086
1898.....	" " " " " " " "	394,337
1899.....	" " " " exclusive of " " " "	329,096
1900.....	" " " " " " " "	344,682

Amount of Waste and Rubbish Removed.

YEAR.		NUMBER OF LOADS.		
		Ash Cart.	Paper Cart.	Market Wagon.
1899.....		1,892	14,903	3,020
1900.....		1,514	11,452	5,494

Force Employed on House Offal.

CITY FORCE.	No.	Hired Teams.	CONTRACTORS' TEAMS.				Total.
			East Boston.	Brighton.	Dorchester.	West Roxbury.	
Sub-formen.....	2	.....	.....	1	.....	.....	3
Inspectors.....	8	.....	.....	.....	.....	.....	8
Teamsters.....	61	8	6	4	9	3	86
Helpers.....	63	4	6	4	17	3	97
Dumpers.....	4	.....	.....	.....	.....	.....	4
Tallymen.....	1	.....	.....	.....	.....	.....	1
Totals.....	139	7	12	9	26	6	199

Amount of House Offal Removed.

YEAR.	No. of Loads.
1896.....	56,402
1897.....	56,783
1898.....	57,764
1899.....	59,956
1900.....	62,975

Material Collected by Districts.

	South Boston.	East Boston.	Charlestown.	Brighton.	West Roxbury.	Dorchester.	Roxbury.	So. End and Back Bay.	North and West Ends.	Totals.
House dirt and ashes.....	28,284	17,055	18,613	13,864	22,485	30,731	65,855	77,843	69,962	344,682
Waste and rubbish....	383	62	209	.....	.....	.....	1,076	10,145	6,592	18,460
House offal.....	4,063	3,726	2,887	1,563	3,084	6,173	9,548	21,102	10,829	62,975
Totals.....	32,730	20,843	21,702	15,427	25,569	36,894	76,479	109,090	87,383	426,117

Number of Loads of Material Collected from January 31, 1895, to February 1, 1901.

Years.	Waste and Rubbish.	Ashes.	Offal.	Total Loads.
1896.....	.....	363,975	56,402	420,377
1897.....	.....	389,098	56,783	445,881
1898.....	.....	394,987	57,764	452,751
1899.....	19,815	329,096	59,956	408,867
1900.....	* 18,460	¹ 344,682	² 62,975	426,117

* Average weight of load of waste and rubbish in 1899, 796 lbs.; 1900, 249 lbs. — aggregating a difference of 1,912 tons more removed in 1900.

¹ Collected by West Roxbury Contractor.....	8,495 loads of ashes.
“ “ No. Dorchester “.....	19,071 “ “
“ “ So. Dorchester “.....	11,637 “ “
Total.....	39,203
² “ “ East Boston “.....	3,726 loads of offal.
“ “ Brighton “.....	1,563 “ “
“ “ West Roxbury “.....	1,040 “ “
“ “ Dorchester “.....	6,173 “ “
Total.....	12,499

STREET DEPARTMENT — SANITARY DIVISION. 163

Final Disposition of all Waste Material by the Sanitary Division, Collected from February 1, 1900, to February 1, 1901, for this and other Divisions.

	Amount Collected.	Deposited on Low Lands.	Towed to Sea.	Plant of N.E. Sanitary Product Co.	Plant of City Refuse Utilization Co.	Collected by Contractors.	Totals.
House dirt and ashes	344,682	220,948	84,531	.....	.....	39,203	344,682
Waste and rubbish	18,460	1,734	303	.....	16,423	.....	18,460
House offal	62,975	.....	23	50,450	.....	12,502	62,975
Street sweepings,	35,534	.....	35,534	.....	.....	.....	35,534
Cesspool dirt	2,916	.....	2,916	.....	.....	.....	2,916
Totals	464,567	222,682	123,307	50,450	16,423	51,705	464,567

Amount Expended for the Collection of House Dirt, Ashes, Waste and Rubbish and House Offal, Labor, Hired Teams and Contracts, and Disposition of same, Deducting Foreman, Yard and Stable Labor, Stock, etc.

DISTRICTS.	Waste and Rubbish.	Expended for Collecting.	
		Ashes.	Offal.
1. South Boston	\$423 50	\$16,994 25	\$9,114 75
2. East Boston	20 00	9,868 08	8,354 42
3. Charlestown	178 00	13,940 03	6,704 00
4. Brighton .....	.....	9,333 25	3,502 25
5. West Roxbury .....	.....	12,931 00	6,627 75
6. Dorchester .....	.....	10,273 15	6,798 85
7. Roxbury	1,411 00	44,392 38	21,991 25
8-9. South End and Back Bay	14,683 00	62,398 01	34,121 22
10. West and North Ends	7,301 00	42,171 00	14,895 00
11. Dumping Boats	13,171 53	3,016 70	55,694 92
Totals	\$37,188 03	\$225,317 85	\$167,799 41

Number of Carts and Wagons Collecting House Dirt and Ashes, Waste, Rubbish and Offal.

	Iron.	Wooden.	Total.
Offal wagons in use by the Sanitary Division.....	33	77	110
“ “ “ “ “ Thomas Mulligan, East Boston		6	6
“ “ “ “ “ Geo. T. Barnes, Brighton		6	6
“ “ “ “ “ David M. Biggs, Dorchester... ..		12	12
“ “ “ “ “ Geo. T. Barnes, West Roxbury		3	3
Ash carts in use by the Sanitary Division		178	
“ “ “ “ “ John J. Moore, West Roxbury		3	
“ “ “ “ “ John McShane, Dorchester		15	
			196
Market wagons in use by the Sanitary Division		13	
Paper carts in use by the Sanitary Division		38	
			51
Ash and offal sleds			158
Total			542

Contracts.

OBJECT.	Contractor.	Price per month.	CONTRACTS	
			Commence.	End.
Removal of house-dirt and ashes:				
Part of West Roxbury.....	John J. Moore.....	\$191 66½	April 10, 1899...	April 10, 1901
North Dorchester.....	Geo. T. Barnes.....	500 00	April 2, 1900...	April 2, 1902
South Dorchester.....	John McShane.....	845 83	March 12, 1900...	March 12, 1902
Removal of house ofal:				
East Boston.....	Thomas Mulligan.....	666 66	Feb. 23, 1900...	Feb. 23, 1901
Brighton.....	Geo. T. Barnes.....	250 00	June 1, 1898...	June 1, 1901
Part of West Roxbury.....	Geo. T. Barnes.....	150 00	April 1, 1898...	April 1, 1901
Dorchester.....	David M. Biggs.....	554 16	May 11, 1900...	May 11, 1902
Lease of wharf, Atlantic avenue.....	Jacob H. Hecht.....	{ 833 3¼	March 1, 1898...	March 1, 1903
Disposal of house ofal.....	New England Sanitary Product Company.....	{ 916 66½	March 4, 1903...	March 1, 1908
Disposal of waste and rubbish.....	City Refuse Utilization Co.....	3,950 00	June 1, 1898...	June 1, 1908
Disposal of waste and rubbish, Brighton District...	City Wastes Disposal Co.....	458 33	Dec. 1, 1898...	Dec. 1, 1908
		* 41 66	Dec. 13, 1899...	Dec. 13, 1909

* No material has been delivered under this contract as the contractor has failed to provide the necessary plant for disposal of the material.

Material Sold by Contract.

OBJECT.	Contractor.	Price per year.	Bills Submitted to City Collector.
Manure of horses at South Yard.....	J. N. Smith.....	\$1 00 a horse.	\$196 24
" " " West and Charlestown Yards.....	Geo. P. Winn.....	2 00 " "	250 32
" " " Highland Yard.....	J. A. Budlong & Son.....	1 00 " "	77 16
			\$523 72

STREET DEPARTMENT—SANITARY DIVISION. 167

MAINTENANCE OF FORT HILL WHARF AND DUMPING BOATS.
AMOUNT EXPENDED.

For towing by Department tow-boat . . .	\$6,710 75	
For towing by hired tow-boat . . .	1,412 00	
	<hr/>	\$8,122 75
For repairs on Fort Hill Wharf . . .	\$94 23	
For repairs on dumping boats . . .	3,767 73	
For repairs on both by Division employees . . .	584 01	
	<hr/>	4,445 97
For rents . . .	\$4,000 00	
For disinfectants . . .	252 00	
For dredging . . .	900 00	
For wharf and dumper supplies . . .	249 63	
	<hr/>	5,401 63
For labor, foreman, messengers, crew and dumpers . . .	\$7,955 07	
For holidays and allowed time for injured men . . .	339 50	
	<hr/>	8,294 57
		<hr/>
		\$26,264 92
Number of trips to sea by Department tow-boats . . .	261	
Number of trips to sea by hired tow-boats . . .	68	
	<hr/>	329

COST PER LOAD, INCLUDING RENTS, ETC., OF TOWING TO SEA WASTE MATERIAL BELONGING TO THIS AND TO OTHER DIVISIONS.

The number of loads of waste material carried to sea . . .	125,307	
The cost per cart load of waste material carried to sea . . .	21.3 cents	
The cost per boat load of waste material carried to sea . . .	\$79 83	
If to the above is added the cost of		
1 new Barney dumping boat purchased in September, amounting to . . .		17,500 00
		<hr/>
The entire cost would be . . .		\$43,764 92
And cost of each boat load would be increased to . . .		\$133 02
And each cart load to . . .		<u>35½ cents</u>

DIVISION CONSTRUCTION, REPAIRS AND HORSESHOEING SHOPS.

An extensive plant is located at the South Yard, 650 Albany street, opposite East Newton street. At these shops all the construction of and repairs on Street and other Departments carriages, carts, wagons, etc., are made, together with the painting of the same. All harnesses are repaired and many made, horseshoeing done and all street signs are painted for the Paving Division.

For work done and materials furnished for outside Divisions and Departments there was received in the different shops as follows :

Wheelwright shop	\$5,383 60	
Blacksmith shop	8,704 26	
Paint shop	5,195 57	
Harness shop	1,904 29	
Horseshoeing shop, South End . .	1,699 05	
Horseshoeing shop, West End . .	1,617 55	
	<hr/>	\$24,504 32

For work done and materials furnished for the Sanitary Division there was expended in the different shops as follows :

Wheelwright shop	\$9,061 16	
Blacksmith shop	7,125 83	
Paint shop	3,335 97	
Harness shop	5,671 69	
Horseshoeing shop, South End . .	1,833 81	
Horseshoeing shop, West End . .	1,306 57	
	<hr/>	28,335 03

Total amount paid out, stock and labor, all Divisions and Departments	\$52,839 35	
Foreman in charge	\$1,338 66	
Allowed time	2,500 00	
	<hr/>	3,838 66
	<hr/>	<u>\$56,678 01</u>

The following signs were built and painted for the Paving Division by the Sanitary Division of the Street Department.

STYLE.	1	2	3	4	5	6	7	9	10	11	Special.	Public Alley.	Private Way.	Total.
Number.....	4	2	391	27	60	199	63	9	287	13	7	28	51	1,141

Cost of Horseshoeing.

	Division Shops.	Outside Shops.
Stock	\$1,429 83	\$2,382 88
Labor.....	5,014 45	.....
	\$6,444 28	\$2,382 88

Divisions.

KIND AND STYLE.	Sanitary Division.	Street Clean- ing Division.	Sewer Division.	Paving Division.	Bridge Division.	County of Suffolk.	Water Department.	Purchasing Agent.	Repairs Division.	Board of Health.	Total.
New shoes.....	6,347	3,188	1,079	406	.....	201	.....	95	24	44	11,384
Bar shoes.....	90	22	75	5	.....	4	.....	.....	.....	.....	196
Resets.....	439	369	80	38	1	6	2	2	1	1	939
Leathers.....	2,803	1,473	479	188	.....	58	.....	40	12	22	5,075
Pads	59	13	24	.....	.....	.....	.....	.....	.....	.....	96

Average cost per shoe, 44 cents.

STREET DEPARTMENT — SANITARY DIVISION. 171

DETAILED ACCOUNT OF AMOUNTS PAID FOR WORK DONE BY THE SANITARY DIVISION FOR OTHER DIVISIONS OF THE STREET DEPARTMENT AND OTHER DEPARTMENTS.

For repair and construction work	\$21,187 72
For horseshoeing	3,316 60
For use of dumping boats	9,053 95
For hay, grain, and straw, board and care of horses,	3,395 34
For feeders, watchmen, and stablemen	1,817 58
For fuel, light, and telephone	692 22
For board and care of sick horses at Veterinary	
Hospital	146 00
For rent for use of Hecht's Wharf	5,200 00
For horses (2), \$450, credited by old horses, \$90,	
County of Suffolk	360 00
For snow work	61 21
	<hr/>
	\$45,230 62

LAND AND BUILDINGS IN CHARGE OF THE SANITARY DIVISION.

South Boston Stable. (Leased.)

Stable and sheds, with accommodations for 16 horses, are located at corner of East Ninth and Vale streets, South Boston, and are occupied jointly by the Sanitary and Street Cleaning Divisions.

East Boston Stable. (Leased.)

Stable and sheds, with accommodations for 15 horses, are located at 324 East Eagle street, and are occupied jointly by Paving, Sewer, Street Cleaning, and Sanitary Divisions.

Charlestown Stable.

With accommodations for 25 horses, is situated on Rutherford avenue; lot contains 17,300 square feet of land; stable built in 1875, cost, \$5,083.07; sheds and outbuildings built in 1879.

Brighton.

Accommodation is provided by the Sewer Division at their stable on Western avenue for five horses of the Sanitary Division.

Highland Stable.

With accommodations for 72 horses, on the old Almshouse lot, Highland street, containing 81,082 square feet. A part of this stable and adjoining lot is used by the Paving Division. There is on this lot a brick stable built in 1873, which cost \$88,594.13. On this lot is an offal-shed, erected in 1875 at a cost of \$1,160.12.

The offal-shed was abandoned April 1, 1897, and in 1900 part of it was remodelled and is now used as a carriage-house and a wash-room.

South City Stables, Shops, and Sheds.

Situated on Albany street, opposite Newton street. The lot belonged to the City before being used for this purpose, and contains 90,780 feet.

The stable and buildings connected therewith are of brick. There are also on the premises five wooden sheds, used for storing wagons, etc. The stable is two stories high, with French roof, and has accommodations for 100 horses. Twenty-three horses are kept in sheds. Total original cost, exclusive of land, \$79,089.23. In 1899 a Veterinary Hospital was built and equipped for the purpose of caring for sick and disabled horses.

Connected with stables are blacksmith, wheelwright, paint, and harness-makers' shops, in which the wagons, carts, harnesses, etc., used by this and other Departments are constructed and kept in repair; also a horseshoeing shop for shoeing the horses of the Department located in this section of the City.

West Stables and Sheds.

The stable is a brick building, a story and a half high, 128 feet by 50, located on North Grove street, built in 1860, with out-buildings attached to the same. It has accommodations for 90 horses in stables and sheds. The lot contains about 45,152 square feet. On May 11, 1896, a horseshoeing shop was established for the purpose of shoeing the horses of the Department stabled in this section of the City.

Fort Hill Wharf.

Containing 21,054 square feet, placed in charge of the Sanitary Division; used as a dumping-station for the City's garbage and refuse, and as a mooring-place for dumping boats and scows which convey this material to sea and to the plant of the New England Sanitary Product Company; cost of constructing platform and dredging dock, \$6,219.33. There are three Barney dumping-boats, one of which was purchased during the past year, and these are in continual use, and are towed to sea by the Street Department tug-boat "Cormorant."

A portion of this wharf is used by the Street Cleaning Division as a locker for patrol push carts, etc., and a part is in use by the Paving Division.

Packard's Wharf. (Leased.)

Situated at 464 Atlantic avenue, used as a berth for dumping-boats in connection with Fort Hill Wharf. Leased from the widow and heirs of Henry C. Snow.

Hecht's Wharf. (Leased.)

Situated at 466 to 470 Atlantic avenue, containing about 35,460 square feet; leased from Jacob H. Hecht, March 1, 1898, for a period of ten (10) years. This wharf adjoins Fort Hill Wharf, and is occupied in part by the New England Sanitary Product Company as a berth for their scows and also by the buildings of the City Refuse Utilization Company for the disposal of waste and rubbish.

New England Sanitary Product Company Plant.

Situated on City Land, Pumping Station lot, Cow Pasture, Old Harbor Point, Dorchester.

APPENDIX E.

REPORT OF THE DEPUTY SUPERINTENDENT
OF THE SEWER DIVISION.

30 TREMONT STREET,
BOSTON, February 1, 1901.

MR. B. T. WHEELER,

Superintendent of Streets:

DEAR SIR, — I respectfully submit report of the expenditures, income and operation of the Sewer Division for the financial year ending January 31, 1901.

The work of the Sewer Division is as follows:

The preparation of plans for sewerage works, the construction and maintenance of all drainage works, including the investigation of complaints in regard to defective drainage, the granting of permits for sewer connections and the preparation of plans for the assessment of the cost of sewer construction; also the examination of the plans of other corporations proposing to construct works in public streets, with reference to their probable interference with sewerage works.

A general statement of the most important work done by the Division during the year, classified according to districts, is given in the succeeding pages.

SOUTH BOSTON.

There have been built in this district during the past year 1,207.31 linear feet of pipe sewers, 3,073.42 linear feet of brick sewers and 12 feet wooden sewer — making a total of 4,292.73 linear feet or 0.818 miles, besides extensive repairs.

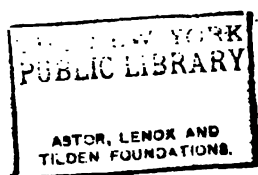
The principal sewerage works completed are:

The "A" street overflow connection with Russell's dock. This work has relieved the sewers in the vicinity of A street and Congress street, which were greatly overcrowded in time of storm.

F street, from West First street to Summer street and its Summer-street extension. This work has provided an outlet



SEWER IN PRIVATE LAND, FORMERLY BLAKE STREET, SHOWING BRICK SEWER BUILT INSIDE OF OLD STONE SEWER.



for sewers already built in Summer street, and others designed but not yet built in the lands of the Commonwealth.

Private land, formerly Blake street. This sewer was made necessary by the new location of the New York, New Haven & Hartford Railroad crossing this street, the old sewer not being strong enough to carry the heavy traffic which will run over this road. The new brick sewer was built inside the old stone sewer without disturbing the surface of the ground.

Rebuilding the B and Seventh streets overflow. This was made necessary by the heavy filling which will be placed over it, to carry the new location of the New York, New Haven & Hartford Railroad.

The sewer in Silver street between B and D streets, together with brick outlet in B street, has been rebuilt.

A new sewer has been built in Bell court.

Numerous minor repairs have been made in the district during the year.

So far as can be determined the following will be the principal works built in this district during the ensuing year:

Sewerage works in Leeds and Dixfield streets, laid out under chapter 323 of the Acts of 1891.

A portion at least of the sewers in the Strandway may be built.

The following sewers are in very bad condition, and should be either rebuilt or repaired as is found necessary at as early a date as possible.

D street, from Dorchester avenue to Eighth street, is very badly settled. It should have had a pile foundation, but was built without it. The rebuilding has been delayed owing to the uncertainty in regard to whether the depression in D street at the railroad bridge would be done away with or not. As long as this depression remained it complicated the design for the sewer, but it seems safe now to assume that it will be filled up to meet the grade of the new street, which will be built upon the old location of the railroad when this is abandoned by the railroad company.

The D street sewer, between West Second street and Broadway, East Ninth and Dunham streets sewers, and the sewer in Mercer street, with its outlet in Vale street.

Gold street, West Fourth street, West Fifth street, West Sixth street, West Seventh street and West Eighth street sewer, all lying between E and B streets.

K street overflow outlet should be extended and finished off in a manner similar to that at N street.

The outlets at H, M, and P streets should be extended through the Strandway to low-water mark in a manner simi-

lar to that adopted at N street, and a new outlet should be built for the overflow of the Q street sewer at First street.

ROXBURY.

There have been built in this district during the past year, 291.18 feet of brick sewers, 5,057.44 feet of pipe sewers, and 2,364.86 feet of surface drains, making a total of 7,713.48 feet, or 1.46 mile.

Sewerage works have been built during the year in

Dunford street and Cardington street.

Chickamauga park.

Fort avenue.

Humboldt avenue, Waumbeck street to Hollander street.

Massachusetts avenue, Swett street to Dorchester brook sewer.

Gainsborough street.

Aberdeen street.

Kempton street.

Bay State road.

Faxon street.

Medfield street.

Roseland street.

Board of Survey street, No. 295.

Gainsborough street, between St. Botolph street and passageway.

Alleghany street.

Sachem street.

Ritchie street, between Columbus avenue and Marcella street, is in progress. This sewer is a continuation of the old brick sewer through the Marcella-street Home property, built about 30 years ago, and is a very important piece of work, as, when completed, it will relieve a large territory in the vicinity of Washington street and Kingsbury street. The sewers in this vicinity being so small, serious flooding results after every heavy storm.

The district which most needs immediate attention in Roxbury is the Ruggles street district, the principal streets of which are: Ruggles, Hammond, Warwick, Westminster and Cabot.

These sewers are all too high to properly drain the cellars, are badly out of line and grade, and are much too small to carry the "combined" flow.

The Bower and Sherman streets district, like the above,

has an old and dilapidated system, and a start should be made to rebuild it in the near future.

The Swett street district, so called, is now prominently brought to our attention by the proposed action of the Street Commissioners in laying out Atkinson street under chapter 323 of the Acts of 1891.

The George-street sewer, from Rockford street to Clarence street, is too small and high to drain the cellars. It should be rebuilt of a larger size and at a greater depth.

Owing to the rapid development of the territory in the vicinity of Humboldt avenue, Ruthven and Hutchings streets, the old sewers have become entirely inadequate. Many of the finest dwellings in this vicinity have been troubled by the backing up of sewage into the cellars, and the street and lawns have been flooded, causing considerable damage. A start should be made on a system of surface drainage during the next year.

Vila street district. The sewerage works necessary for Brookline avenue, between Longwood entrance and the Riverway will be built as soon as the plans and specifications can be completed. This will commence the work on the outlet for the Vila street district, the lower end of which is in Brookline avenue.

This district is at present discharging both house sewage and storm water into the Metropolitan sewer, and as soon as the portion of the surface drain in Brookline avenue is completed it should be carried at least as far as Vila street; and if the surface drainage system is not carried over the district this outlet should be converted into a temporary overflow for the system.

Fenway lands. — The surface drainage of this district, or as much of it as is built, is still discharging on to the surface of the marsh. The present outlets are in Kilmarnock street at Boylston street and Ipswich street, near Lansdowne street. The main surface drain of the district will be in Jersey street.

It is recommended that when the Jersey street drain is built the existing surface drains be extended to it, as the discharge of this water on to private land must soon cause a nuisance.

Smith Street District. — This district suffers severely in storms which are not of the severest; something should be done as early as possible.

A large surface drain in Smith street, from Stony brook channel in Parker street to Whitney street, would probably effect enough relief to silence a majority of the complaints from the residents of this district. Plans and estimates

have been prepared, and work will begin as soon as the work of the Metropolitan Sewerage Commission in this district will allow.

The wooden outlet for Muddy river in Brookline is in very bad condition, and will have to be extensively repaired and a portion rebuilt during the coming year.

Plans are in preparation for the proposed by-pass channel the Back Bay Fens for the foul water flow of Stony brook, and the work may be begun during the coming year.

On the Muddy river parkway, or Jamaicaway (so called), between the gate-house on Brookline avenue and Morss avenue in Brookline a similar problem exists to the Stony brook foul water channel, namely, the problem of providing a channel or channels for conveying away the flow of Muddy river, when the same is too foul for the open channel. A design has been prepared for this purpose, and the cost estimated at \$316,000. The town of Brookline discharges more foul water into the Muddy river channel by far than the City of Boston, and should join in building this channel, or else should be advised to take care of pollution on its own side.

Of the above-named price, if the two municipalities join, 32 per cent., or \$101,120, should be borne by the City of Boston, and 68 per cent., or \$214,880, by the town of Brookline; these proportions being based upon the respective areas of each municipality located in the watershed.

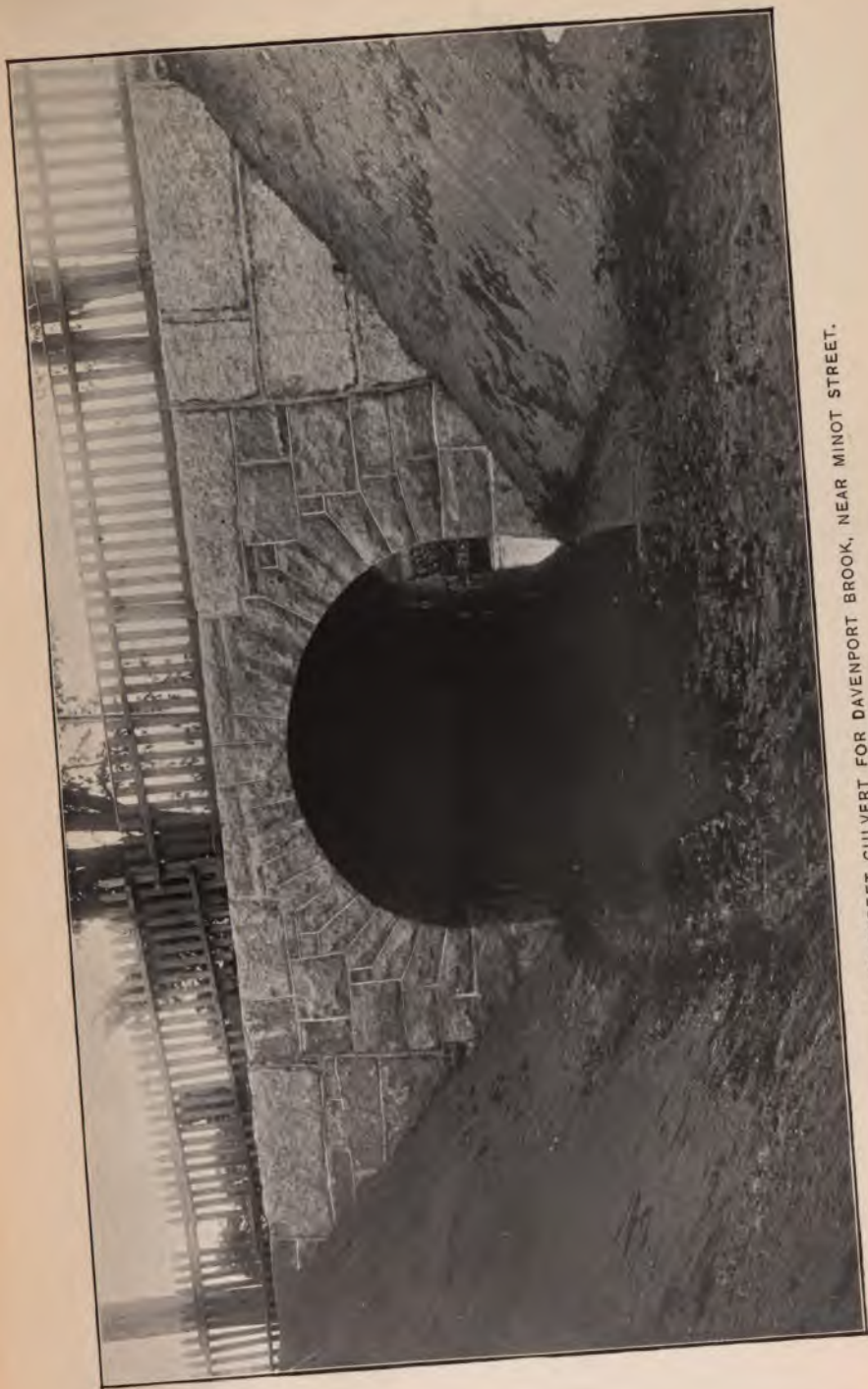
DORCHESTER.

There have been built in this district during the past year 24 feet of brick sewers, 17,746.93 feet of pipe sewers, 4,907.31 feet of brick surface drains, 11,841.96 feet pipe surface drains, 60.24 feet stone surface drains, 199.20 feet wood surface drains, making a total of 34,779.67 feet, or 6.59 miles.

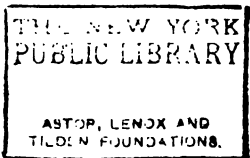
The following work has been built during the year:

The 5-foot conduit, and house sewer on each side of the same, in Ceylon street, from Quincy street to Columbia road, has been completed. This drains the low portion of Columbia road near the railroad bridge and adjacent territory between Washington and Glendale streets and the low ground in the vicinity of Richfield street.

Massachusetts avenue, from Swett street to Edward Everett square, has been provided with house sewers from the railroad crossing to Edward Everett square and with catch-basins and surface drains for the entire length.



ADAMS STREET CULVERT FOR DAVENPORT BROOK, NEAR MINOT STREET.



The Magazine street sewer which had an outlet into the South Bay at Massachusetts avenue has been connected with the interceptor, doing away with the outlet which had become a nuisance.

The repairing of the Dorchester interceptor at Freeport street has been begun.

Sewerage works in Boston, Draper, Barry, Conrad and Annabel streets have been completed, and have been begun in Hancock street.

A considerable amount of surface drainage work has been built in Dorchester during the past year. On the Canterbury branch of Stony brook the 10-foot circular brick conduit has been extended through Lyons street from Callender street nearly to Franklin field. A 7-foot circular brick conduit has been built on this brook between Bernard street and Franklin field. The Oakland Garden fork of this branch has been extended up Millet street to the culvert crossing this street near Wheatland avenue.

A pipe conduit is being constructed in Norfolk street, between Bernard street and Wentworth street, for a tributary of this brook, which comes from the south, and is known as the Wentworth street fork. This conduit should be extended through Wentworth street to the land of Harvard College. A 24-inch pipe surface drain, which is also a part of this system, has been carried from West Park street, through Kilton street, to and across the N. Y., N. H. & H. R.R., at Harvard street station, and obviates the flooding which regularly occurred at this point after every heavy rain-storm.

On Tenean creek, the structure on the south branch has been completed between Gibson and Dix streets, thereby making the structure complete from tidewater to Dorchester avenue, at Rosemont road.

The Ashmont street fork has been completed to Templeton street; and one branch continued to Wrentham street, near Bruce street.

On the north branch the conduit has been completed as far as Westville street, and now provides an excellent outlet for surface water for an area of about 350 acres of well-built-up territory, from Mt. Bowdoin to Park street and Dorchester avenue.

Davenport Brook.—A culvert has been built for this brook on Adams street, near Minot street, the Adams street sewer being lowered by siphoning in order to provide waterway for the culvert.

A brick conduit has been built for the brook in Magdala

and Van Winkle streets, and private land adjacent. Between Bailey and Burt streets the brook has also been enclosed in a brick conduit.

In addition to the above-mentioned work, house sewers or surface drains have been built in Cottage Park, Corbet, Maxwell, Codman, Norfolk, Millet, Burt, Florida, Shepton, Callender, Templeton, Chase, Fenton, Glen, Woolson, Hosmer, Harlem, Samoset, Gately, Beaumont, River, Adams, Washington, Mascot, Van Winkle, Montague, Shepton, Seaborn, and Florida streets, and in Neponset and Dorchester avenues; and are now in progress in Moseley street and Spencer street, between Athelwold and Harvard streets.

The principal work in Dorchester is, and will continue to be, the extension of the existing sewerage systems.

The sewerage system in Blue Hill avenue, between Mattapan square and Walk Hill street, is in an unfinished condition and should be completed. A part of the house sewer on the east side has been built in connection with the Matpan brook conduit, but remains without an outlet.

At the Columbia road crossing of the Midland Division of the N. Y., N. H. & H. R.R. the sewerage system is in a complicated condition, a number of temporary expedients having been adopted pending the completion of the new railroad bridge. As soon as the abutments have been constructed the sewer system at this point will be completed in permanent shape.

The old pipe sewers in Vinson and Spring Garden streets need rebuilding.

In order to improve the conditions under which the Talbot avenue sewer is operated a complete separation of the house sewer and storm water systems throughout the Talbot avenue and Harvard street district should be effected. This work will consist principally in building surface drains to take the flow of the catch-basins out of the existing sewers.

In Dorchester a large amount of surface drainage work is called for, of which the following items may be mentioned:

Oakland Brook Culvert, across River Street, near the Hyde Park Line. — This culvert is in a dilapidated condition and unable to carry the brook when in flood, the water going over River street at this point. The brook at River street is the outlet for a drainage area of about 700 acres, partly in Hyde Park and mostly unimproved land. This culvert ought to be rebuilt at once, and takings made for the outlet down to some convenient point where an outlet can be obtained into the main brook or the Neponset river.

Mattapan Brook. — On this brook the conduit which has been built from the river to Fremont street should be extended far enough to cross the railroad track at least, and this work should be completed before work is begun on the abolition of the Blue Hill avenue grade crossing. The building of surface drains and culverts in West Selden street on this system may necessitate some clearing out and ditching of the watercourse between the points last named and West Selden street, but will hardly require the building of any masonry structures.

Davenport Brook. — This brook should be deepened at the lower end, below the culvert recently built at Adams street, enough to drain off the stagnant water standing under the culvert. A covered culvert should also be built between Van Winkle and Bailey streets, and between Burt and Ashmont streets. The pipe culvert under the car-house opposite Armandine street should be extended to connect with the lower Armandine street culvert and thence to the upper Armandine street culvert. There should also be a pipe conduit laid between the Rockwell and Stockton street culverts.

Tenean Creek. — The south fork of the brook should during the coming year be extended through Rosemont, Samoset, Centre and Gorham streets, and through private land, Brent, Wainwright and Lithgoe streets to the culvert across Centre street into which the Seaborn street system of surface drainage now discharges. The Ashmont street fork of this brook has been built as far as Templeton street, and one tributary continued as far as Wrentham street near Bruce street. Both tributaries should be continued up to Ashmont street during the coming year.

Freeport Street Brook. — The improvement of this brook between Columbia road and Hancock street near Winter street which has been forced by the widening and improvement of Hancock street will necessitate the improvement of the lower reaches of the brook, and it should be built during the coming year from tidewater to Hancock street, partly in private land and partly in the public streets. The Crescent avenue surface drain should be built across the New York, New Haven & Hartford Railroad and through Shoreham street before the new road-bed is put in use, and in order to allow the completion of Columbia road where Shoreham street crosses it. If possible it should also be extended up Carson street and Crescent avenue and relief overflows established from the existing sewer system into it in order to relieve the flooding which frequently takes place in this vicinity.

Dorchester Brook Sewer.—This sewer system is built throughout most of its extent on the combined system, but there are some parts where separate sewers have been put in. The separation of this sewerage system is one of the problems of the future, and the sooner it is undertaken the less expensive it will prove.

Canterbury Branch of Stony Brook.—On account of the development of the territory in the vicinity of Blue Hill avenue and Franklin field, this branch of the brook should be enclosed in a covered conduit from Don street to and across Blue Hill avenue and thence to Harvard street. Westerly from this point it may be improved by ditching for a long distance, no permanent structure seeming to be required until some time in the future.

A covered conduit should also be built from Lyons street northerly and westerly across Franklin field, gathering in all the branches coming from the east and connecting with the Franklin park brook (so called) near the corner of Talbot avenue and Blue Hill avenue. This last water course should also be improved and covered from Franklin field to the culvert across Blue Hill avenue near Angell street.

The Oakland Garden fork of this branch is now enclosed in a covered conduit all the way from Franklin field to the old site of the Oakland garden, except a short piece in Millet street and Wheatland avenue, where it flows through private land. This portion should be completed.

EAST BOSTON.

There have been built in this district during the past year 93.39 feet of brick sewers, 2,049.75 feet of pipe sewers, 48.70 feet of brick surface drains, 278.60 feet of pipe surface drains, making a total of 2,470.44 feet, or .46 mile.

The most important work done in this district during the past year has been the building of house drains, catch-basin drains and catch-basins in Wordsworth street, between Saratoga and Pope streets; building ventilating shafts for the Chelsea, Pope and Curtis street sewers, and cleaning and coating inside with Portland cement the sewer in Chelsea street, from Chelsea bridge to Curtis street. This work is now in progress, and is for the purpose of preventing the petroleum with which the ground is saturated from percolating into the sewer through the brick work. This oil evidently leaks from the tanks of the oil works on the north-westerly side of Chelsea street.

Sewers have also been built in Ashley street, Bennington street boulevard, Chelsea street, Eagle street, and private land, and Sumner street.

The most important work in the East Boston district for the ensuing year will probably be the building of the sewerage works necessitated by the laying out of the Bennington-street boulevard, although it is hoped that the Division may be able to make a start on at least one of the three intercepting sewers, which are very badly needed in this district, namely, the Breeds Island low level intercepting sewer; the North side intercepting sewer and the Moore street district interceptor.

It is also desirable to build a system of sewers for the East Boston parkway, so called, and to rebuild the Bennington and Chelsea street sewers from Eagle square to Sumner street.

BRIGHTON.

There have been built in this district during the past year 12,538.13 feet of pipe sewers, 2,746.01 feet of brick surface drains, 3,373.24 feet of pipe surface drains; making a total of 18,657.38 feet, or 3.52 miles.

The most important work in the past year has been in the line of surface drainage.

Sewers and small surface drains have been built in Tremont street, between Oak square and the Newton line; and in Cambridge street, between Union square and Washington street.

A covered brick conduit for the Faneuil Valley brook has been built in private land and Fairbanks street, from a point near Faneuil street to the culvert on Lake street, near Washington street, and a small pipe surface drain has been built in Washington street, between Cambridge street and Dighton place.

Sewers or surface drains have also been built in the following streets:

Adams street,	Cummings road,
Bothwell road,	Donneybrook road,
Brooksdale street,	Idlewild street,
Corrine road,	Maple avenue.

Private land north and south sides of Commonwealth avenue to Harvard avenue.

Private land and Madison avenue,	Riverview road,
Newcastle road,	Wallingford road.
Raneleigh road,	

The most important work of this Division in Brighton for several years will be in the line of surface drainage. There are a number of sewers which are too small to carry the floods of surface water, from which complaints are frequently received. They require relief by the building of surface drains.

Salt Creek brook conduit should be extended from its present terminus, near Gardner street, to Charles river. The longer this work is delayed the greater will be the cost, as it will be necessary to pass under the tracks of the B. & A. R.R., and the railroad people are constantly increasing the number of tracks at the point the conduit must pass under, they having freight yards at this place.

A beginning should be made on the conduits for the Shepard street brook, and also for the large outlet conduit from the Wool pond to Charles river, which will form the outlet both for Shepard street brook and the Faneuil Valley brook. The improvements in the upper waters of the Faneuil Valley brook, recently made, will force the City to do something on the outlet in the near future.

The outlet of the Everett street overflow should be extended to the Charles river at an early date, on account of floodings which occur during heavy rains. This outlet formerly emptied into a tidal creek which was filled up by building of the Speedway by the Metropolitan Park Commission. This Commission should bear a large portion, if not the entire, expense of extending this outlet.

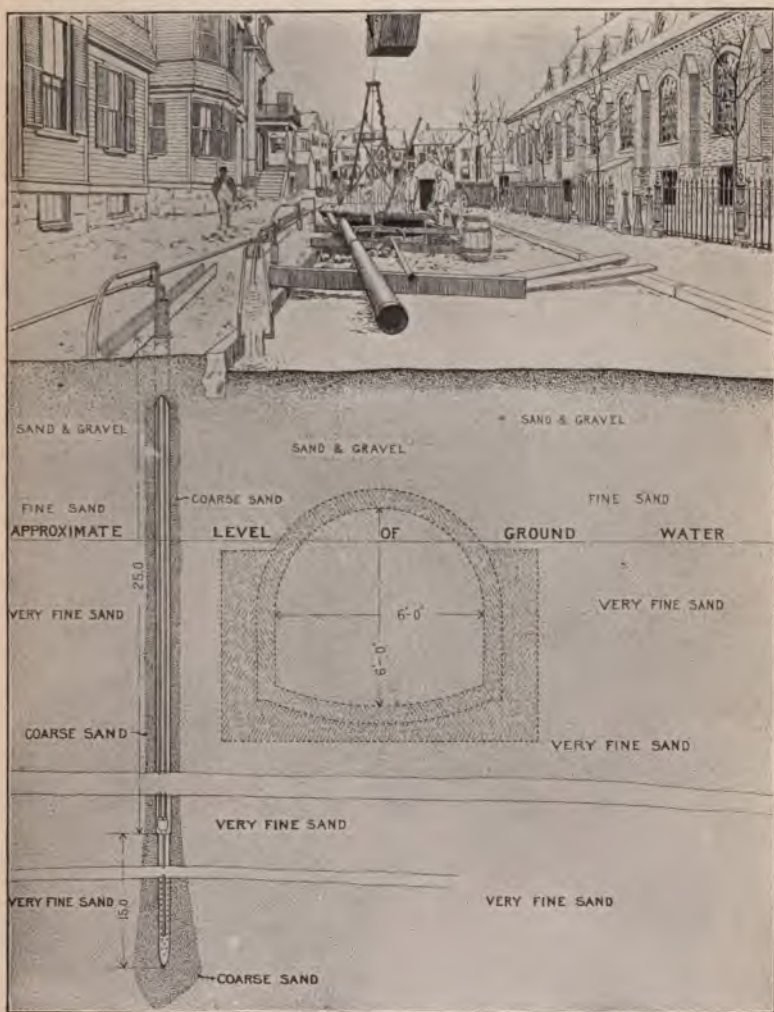
Surface drains should be built throughout the Aberdeen district, as the sewers in this district are on the separate system, draining into the town of Brookline system, and no catch-basins can be connected with them.

Requests have been received for house sewers in Summit avenue, Mackin street, Allston terrace, and Hichborn street, all meritorious cases.

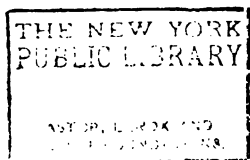
WEST ROXBURY.

There have been built in this district during the past year 1,018 feet of brick sewers, 9,537.44 feet of pipe sewers, 3,038.86 feet of brick surface drains, 2,867.70 feet of pipe surface drains; making a total of 19,267.77 feet, or 3.65 miles.

The most important work done in West Roxbury has been the building of Goldsmith brook conduit in South and St. Joseph streets, and the building of a house sewer in Gardner street, between the Metropolitan sewer and Baker street, both quicksand jobs.



ST. JOSEPH STREET SEWER, SHOWING METHOD OF LOWERING THE LEVEL OF GROUND WATER DURING CONSTRUCTION.



In the case of Goldsmith brook conduit, a bed of quicksand was encountered sixty feet deep below the grade of the conduit, and borings showed no stratum of gravel through which water could be pumped in order to dry out the quicksand, and a novel expedient was resorted to; that is, the sinking of tubular wells twenty to twenty-five feet below grade, surrounded by gravel, through which the water from the quicksand filtered to the well. The method adopted to accomplish this was first, to sink a 10-inch pipe by means of a water jet, then to place inside of it a 2½-inch pipe, perforated for about five feet at the bottom. This smaller pipe extended down to the bottom of the large pipe, the space between was then filled with coarse sand and the large exterior pipe withdrawn, leaving the perforated pipe surrounded with coarse sand. The water which filtered through was then pumped from the 2½-inch pipe by means of a steam ejector pump, placed at the bottom of the well, connected with a still smaller pipe in the interior of the 2½-inch pipe.

This scheme proved successful, and the quicksand was dried out enough to enable the work to proceed.

A complete sewerage system has been built in Perkins street and in LaGrange street, with an outlet in Pleasant street.

Sewers or surface drains were also built in Bellevue avenue, Ashland and Rowe streets, and private land, Beech street, Belgrade avenue and Lorraine street, Colberg avenue, Congreve street, Corey and Park streets, Corinth, Dale, Eastbourne, Westbourne, Cornell and Forest Hills streets, Grosvenor road, Knoll street, Oakview terrace, Selwyn street, Stratford avenue, and Washington street.

Surface drains should be built throughout the Mount Hope district, to relieve the congested condition of the sewers in times of storms. These sewers will outlet in the Roslindale branch of Stony brook, near its junction with the main brook. The Hewlett street branch of the Roslindale branch should be taken into a covered conduit from the South street culvert, near the new playground, to Walter street, and a covered conduit should also be built from Clarendon avenue across Poplar street to the Sycamore street branch of Stony brook to take care of the watercourse which floods Poplar street, near Heathcote street.

In order to provide the surface drainage for Rowe and Seymour streets a pipe surface drain should be built from the Neponset avenue branch of Stony brook, to and across the railroad location and longitudinally along the same and thence to and through Seymour street.

The Kirk street brook should be enclosed in a covered conduit from Kirk street to Centre street, and surface drains built in Farquhar, Fletcher, Congreve, Hewlett, Selwyn, Mozart, Walter and Mendum streets.

In addition to the surface drainage work required in West Roxbury, the most important house sewers required at present are the following, which will probably be built during the ensuing year:

Mendum street and outlet, Spring street, between Gardner and Centre streets, and outlet in Gardner street to Baker street, Elgin and Lorette streets, house sewers and surface drains, Montclair avenue and outlet, Sigourney street and Selwyn street.

CHARLESTOWN.

There have been built in this district during the past year 870.84 linear feet of pipe sewers and 1,410.63 linear feet of brick sewers, making a total of 2,281.47 linear feet, or .43 mile, besides extensive repairs.

A supplementary, 3 feet 6 inches circular sewer, has been built in Cambridge street, between Sever and Craft streets. This work was necessitated on account of the raising of the grade on Cambridge street in order to abolish the grade crossing, and increases the capacity of the existing sewer between these points, which is too small to carry the storm flow. This sewer should be extended to Rutherford avenue, thence through Rutherford avenue and Mishawum street to the Beach street outlet, about 1,200 feet.

Sewers have also been built in Arlington avenue and Beacham street, and are in progress on Alford street, on the Everett side of Mystic river.

The Rutherford avenue sewer should be rebuilt from Cambridge street to the outlet near Dunstable street.

The building of the sewers in the Beacham street district should also be carried on, including Beacham, Dorrance, Hamblen, Ford, West, George, Gilbert and Temple streets, and a connection should be made with the Metropolitan sewer in Arlington avenue.

The sewers in Tibbetts Townway and in Tufts street are in poor condition and should be rebuilt.

There is also needed a sewer in Concord street, from Monument square to Bunker Hill street.

The Warren avenue connection with the Metropolitan sewer should be completed. Part of this was built some two years ago, but, as at that time the Charles River avenue bridge was blockaded as far as traffic was concerned, it was

absolutely necessary to leave the Warren avenue bridge open and as unobstructed as possible.

At the present time the new Charlestown bridge having been completed and open to traffic, it will cause comparatively little inconvenience to people, travelling to and from this part of Charlestown, to close Warren avenue while putting in this connection, which probably would not occupy over a month.

CITY PROPER.

There have been built in this district the past year 2,936.08 linear feet of pipe sewers and 1,295.21 linear feet of brick sewers, making a total of 4,231.29 linear feet, or .80 mile, besides extensive repairs.

The Canal street relief sewer is now completed. Its end is at the junction of Canal street and Traverse street. When this sewer was first designed, it was the intention to rebuild the Canal street sewer, between Traverse street and Causeway street, and when this is done an improved connection will be established between the west side and east side intercepting sewers.

The sewer in Beverly street, which is in much worse condition than the others in the district, is being rebuilt between Charlestown and Causeway streets, and will therefore furnish a second connection between the west side and east side intercepting sewers.

The sewer in Haverhill street has recently been rebuilt. The material in which this sewer was rebuilt is of doubtful character, not soft enough to require piles, and yet not hard enough to build without the assistance of some artificial foundation. It was therefore decided to build into the side walls 6-inch I beams, one over the other, with broken joints.

In Commercial street, at Clark street, there is a wooden sewer which was in some way connected with tide-water. A great deal of salt water was let into the intercepting sewer. To remedy this difficulty the wooden sewer was cut off and abandoned as a sewer, although it can still be used as a catch-basin drain, a by-pass having been built around the tide-gate manhole to the overflow sewer. The houses which were connected with this sewer have been connected with the intercepting sewer, this being a departure from the customary rules of the Division and allowed; first, because this section of the interceptor is above the district regulator, and second, because if a new sewer were built to take the place of the old one it would have to lay alongside of, and almost against, the intercepting sewer and eventually dis-

charge directly into it. For these reasons it was thought better to make the exception, and a new tide-gate was built to take the place of the old leaky one on the overflow.

Oak Street. — The old sewer between Hudson and Albany streets, which was badly settled, has been rebuilt.

Stillman Street. — The old sewer between Endicott and North Margin streets, which was badly settled, has been rebuilt.

Utica Street, between Kneeland and Beach Streets. — The old sewer was in very bad condition and needed rebuilding for a number of years. This has finally been done, and is one of the most difficult jobs of its kind that has been encountered for some time. The sewer in Kneeland street was too high to form an outlet for this sewer if laid low enough to drain the house drains, which had probably settled with the old sewer. It was therefore decided to build a length of the Kneeland street low level house sewer between South street and Utica street. For temporary purposes this has been connected with the Kneeland and South streets sewer, which is on the "combined system," but should be continued to the end of the sewer which connected with the intercepting sewer in the railroad yard, the end referred to being on the line of Atlantic avenue.

Boylston Street, between Carver and Tremont Streets. — The building of the new theatre made it necessary to construct a new sewer in this street. This sewer is about 20 feet deep.

Albany Street, at Oswego Street. — The regulator on the Oswego street sewer at this point and the connection with the intercepting sewer have been built. This is one of the last pieces of work necessary to complete what is known as "changing the South Cove system."

East Brookline Street, between Harrison Avenue and James Street. — The sewer in this street was in very bad condition. It has been rebuilt. This sewer furnishes an outlet to a private drain from the Conservatory of Music, the poor outlet of which caused much annoyance.

Pleasant Street, at Porter Street. — Where the elevated railway structure crosses Pleasant street at Porter street, the railroad construction made it necessary to place a siphon in the sewer. As at some future time it is intended to carry the Kneeland street low-level house sewer into the Church street district, through Pleasant street, it was decided to lay the new pipes, which now form a siphon, at such a grade that the pipe which is to form the house sewer will be drained by the Kneeland street sewer, while the surface drain, which will find

its outlet through the Church street district, will always remain as a siphon.

Sewers have also been built in Eastern avenue, Poplar, Congress, Newland and Commercial streets, and Trinity place.

The principal work of the Division in the City Proper for the ensuing year will be the repairs and reconstruction of old sewers, which on account of settlement or decay have become unfitted for their purpose. There are a large number of sewers in the North End district which are in such condition as to offer practically a free entrance of tide-water into the sewerage system, and these should be replaced with sewers of modern design at as rapid a rate as possible, in order to relieve the intercepting sewers and the pumping station from this amount of leakage as well as from a sanitary standpoint.

MAIN DRAINAGE WORKS.

The principal innovation in the organization of the force, charged with the maintenance of this most important branch of our public works, has been in the combination of the districts including the Moon Island Reservoir with its appurtenances, Dorchester Bay Pumping Station, and the main and intercepting sewers and the maintenance of the channels of Stony brook under a single superintendent, responsible to the deputy superintendent of the Division; these various works, of necessity depending one upon the other for their efficient operation, were formerly each under independent supervision, and the placing of responsibility for any lack of co-operation was impossible. This change has greatly increased the efficiency of these branches of the service.

This work at present consists of the care and maintenance of the main and intercepting sewers throughout the City, pumping station and deposit sewers at Calf Pasture, Dorchester, and the reservoir and outfall and discharge sewers at Moon Island, Pumping Station at Lyons street, Dorchester, and the maintenance of the channels of Stony brook.

MAIN AND INTERCEPTING SEWERS.

The work of the main and intercepting sewer force consists of the building, repairing and cleaning of all tide-gates, regulators, sumps and overflows connecting with the Metropolitan sewers in Brighton, Charlestown, East Boston and Dorchester, as well as the similar connections with the main drainage works in the City Proper, Roxbury and South Boston, and

the cleaning of the main and intercepting sewers belonging to the City, and care of manholes on same.

The following shows the number of gates, regulators, sumps and overflows that have to be inspected after every storm or heavy rise of sewage in the main sewer, and cleaned when necessary.

	Gates.	Regulators.	Sumps.	Overflows.
Brighton	40	16	17	20
Charlestown	24	9	11	11
East Boston	32	15	16	17
	<hr/> 288	<hr/> 61	<hr/> 111	<hr/> 144

The length of sewers to be inspected and attended to by this force in the City is twenty-four (24) miles.

The following is an account of the work done from February 1, 1900, to January 31, 1901 :

MAIN AND INTERCEPTING SEWERS.

Length of sewers cleaned,	about 5 miles
Number of connections built,	6
“ “ new tide-gates built,	9
“ “ vapor gates “	17
“ “ regulators “	1
“ “ “ repaired,	30
“ “ tide-gates “	133
“ “ flushing-gates repaired,	8
“ “ gates cleaned,	2,000
“ “ regulators cleaned,	1,200
“ “ sumps cleaned,	3,800
“ “ overflows cleaned,	40
“ “ manholes repaired,	47

An automatic sewer gauge has been set up at the yard on Massachusetts avenue, to record the height of the sewage in the main sewer.

Eight other automatic gauges have been built, and they will be installed during the ensuing year in different places upon the branch intercepting sewers tributary to the main drainage system. The installing of these gauges will greatly facilitate the work of the Division in locating the source of any undue flow of water in the sewers.

Self registering tide-gauges will be installed at Moon Island, and at some point in the Charles river basin.

PUMPING STATION, CALF PASTURE.

The extensive repairs and alterations on the high duty pumps, and other work which has been going on for two years, are nearly completed, and it will now be possible, except in times of storm, to handle the sewage without running the low duty pumps. This will make a marked saving in coal consumption.

It will be necessary to start without delay the construction of the addition to the main building for the accommodation of the new 72,000,000-gallon pump that is under construction. New quarters for the machine shop will have to be provided, and the shop should be in operation before a start is made in setting up the new pump.

The deposit sewers are more nearly free from sludge than at any time since the system has been in operation. A day force only is required at present to keep them in such condition.

On February 1, 1900, there was in the deposit sewers 3,627 cubic yards of sludge; during the year there has been removed 13,242 cubic yards, and there is at present only 290 cubic yards in the sewers.

Other methods for handling this sludge will have to be adopted in the near future in order that the deposit sewers and the reservoirs at Moon Island may be utilized to their fullest capacity. Studies of such a system and plans for necessary apparatus have been made, and a beginning will be made during the ensuing year on necessary changes.

The following principal repairs and alterations have been made during the year:

Completion of Contract "F" covering extensive alterations on Leavitt engines, increasing their daily pumping capacity 16,000,000 gallons each.

New reheaters and new oiling gallery on Leavitt engines.

New valve chests and rods on Worthington engines and general repairs.

New circulating pump for supplying salt water to condensers of Worthington and Leavitt engines.

General repairs on piping.

New heating apparatus installed for engine-room and repairs to engine deck plates.

New jacket piping and returns to boilers from No. 3 and No. 4 engines.

New blow-off pipes and side and bottom manholes to boilers.

Rebuilding crematory for filth hoist screenings.

Many minor repairs have been made, and the plant is now in a fair condition of efficiency, but many other minor repairs will be necessary to put it in first-class condition.

The usual table showing the work done by the Pumping Station plant has been omitted from this report, as it seems to me that the methods used in determining the results given during previous years have been too crude to be reliable, and that the amount of sewage pumped by the plant has been largely overestimated. Reservoir measurements at Moon Island seem to show that the present dry weather flow through the Pumping Station does not greatly exceed 75,000,000 gallons per day of 24 hours.

LYONS-STREET PUMPING STATION.

At this station, besides the regular maintenance, the following work has been done :

Boilers and steam piping insulated ; one new driving belt put in, and old one repaired ; general repairs on inspirator, and feed-piping and gas-piping installed. Building has been ventilated and structures on the premises painted.

MOON ISLAND.

Besides the regular maintenance of these works, which consists of the storing and discharging the sewage of the City, twice daily, and the ordinary repairs incidental thereto, the following work has been done :

Completion of original contract for extension of reservoir.

Setting up of four gates and rams on flushing sewer.

Installation of air compressor, tank, shafting, etc.

Extension of gate-house for machine shop.

Paving of slope on south-westerly side of island.

Grading, sloping and loaming of surface west of reservoir.

Filling of cove, slope paving, and grading near easterly corner of reservoir.

Awarding of contract for four gate-houses on flushing sewer.

The following new construction or renewals should be attended to as far as possible the coming season :

New stable and storehouse.

Electric wiring and piping.

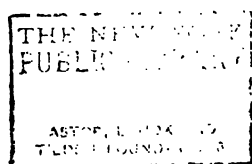
Fencing around reservoir.

Relaying and extension of salt-water main for washing reservoir walls.

Filling for protection of portion of sea-wall and grading of high slope at Moon Island head.



STONY BROOK, JUNCTION OF MAIN AND SUPPLEMENTARY CHANNELS AT BOYLSTON AVENUE.



Sea-wall from gate-house to wharf.

Extension of wharf and dredging front of same.

Relaying original riprap for at least 1,000 feet on north side of discharge sewer.

STONY BROOK.

During the current year the following lengths of conduit have been built for the accommodation of Stony brook channels:

1,018 linear feet of $15\frac{1}{2}$ by 17 feet brick, main channel, ending at Cornwall street.

1,225 linear feet 9 by $9\frac{1}{2}$ feet brick, supplementary channel in Boylston avenue and Green street.

1,018 linear feet of 2 by $3\frac{1}{2}$ feet brick, West Roxbury low-level sewer.

The 9 by $9\frac{1}{2}$ feet supplementary channel of Stony brook is now connected with the old channel at Green street and will take the entire dry weather flow. As this is the portion of the flow of Stony brook which causes annoyance, we have gained by the building of this supplementary channel the practical advantages of extending the main channel to Green street. The appropriation for this work is exhausted.

The work on the maintenance of Stony brook consists of the cleaning of the covered main channel of the brook, from the Back Bay Fens to Cornwall street, with the repairs of all manholes and manhole coverings on this section; the cleaning of the open channel from Cornwall street to the Hyde Park line, and repairing all walls, banks, and fences; the cleaning of the old overflow channel, from the premises of the Boston Belting Company to the Back Bay Fens, and the care of all overflows on above channels, making total of $6\frac{1}{2}$ miles of watercourse to be cared for.

The old Stony brook channel from the gate-house in the Fenway opposite Bryant street to the premises of the Boston Belting Company, on Elmwood street, is built of rubble stone; part of the distance the construction being a double arch of dry rubble and part a double channel of square section, the sidewalks being loose rubble and the covering stone granite slabs. Both of these sections are in very precarious condition, the rubble arches being so loose that stones can be pulled out by hand from the inside. One or two cave-ins have occurred on this section, and when the Huntington avenue boulevard was built across it it was lined inside with brick masonry because it was unsafe to construct the street surface of the new boulevard over it. On the

square section the granite covering stones are continually breaking in the middle, and have been replaced in many places with timber. In other places the stones have been shored up with timber bracing. It is feared that either one of these sections may collapse at any time, and cause serious and expensive accidents. This channel should be rebuilt throughout its entire length in order to be safe, and at the time of rebuilding pipe sewers should be built on each side to take the drainage of abutting estates which are too low to drain into the existing sewers. Pollution unavoidably finds its way into this channel from these estates and will continue to do so until they are provided with proper sewerage.

The estimated cost of rebuilding channel, together with pipe sewers, is \$302,000.

There are a number of places along the line of the brook where repairs are necessary to the walls and fences. This work should be done as soon as possible after the frost leaves the ground in the spring. The need of these repairs, generally, is caused by the abutters raising the grade of their lots by filling.

ENTRANCE FEES, PERMITS, AND ASSESSMENTS.

Entrance fees to the amount of \$5,712.86 have been collected from estates upon which no sewer assessment was ever paid, in accordance with Chapter 38, Section 10, of the Revised Ordinances of 1898.

Bills for sewer assessments, amounting to \$617.36, have been deposited for collection, representing those estates assessed under Chapter 456 of the Acts of 1889, and amendments thereto, which have been connected during the year with the sewers for which they were assessed.

Two thousand one hundred and seventy-six (2,176) permits have been issued to licensed drain-layers to make connections with the public sewers, and the work done under these permits has been inspected, and a record of the same made on the plans of this Division, in accordance with the provisions of Chapter 38, Sections 6 and 10, of the Revised Ordinances of 1898.

Eight hundred and nine (809) permits have been issued to District Foremen and Contractors for construction and repairs of sewers and catch-basins.

Plans for the assessment of estates benefited by sewer construction have been furnished the Street Commissioners, representing 62,093 feet of sewers, costing \$264,074.

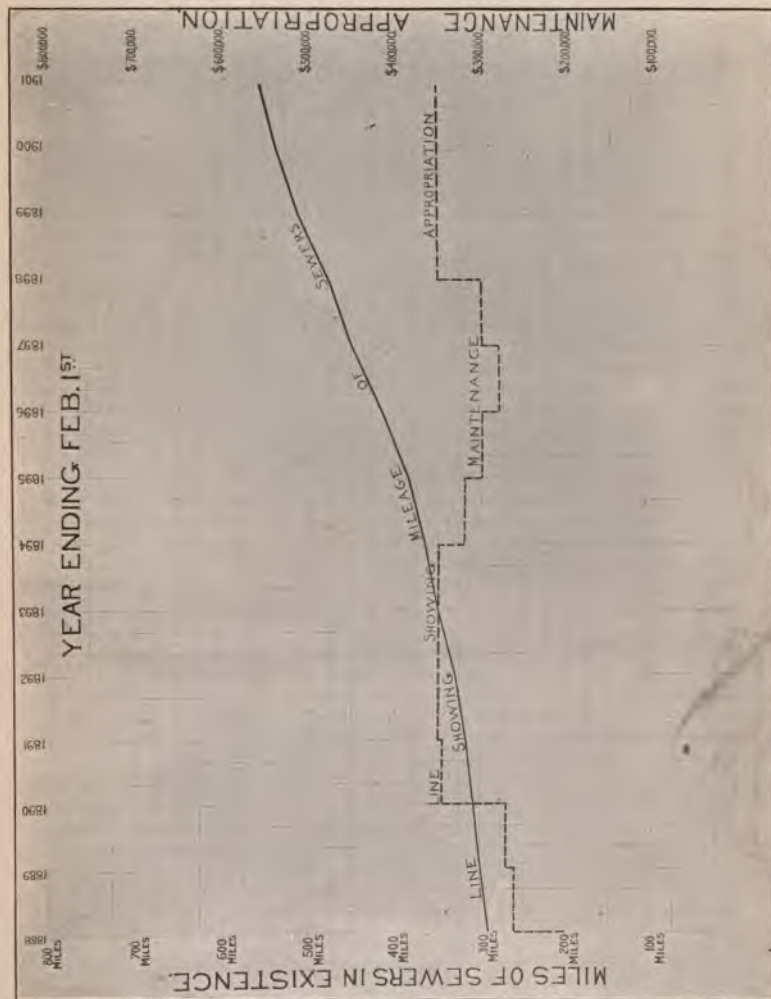
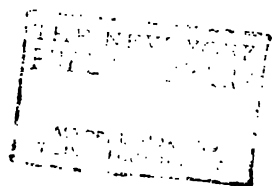


DIAGRAM SHOWING RELATIVE INCREASE IN MILES OF SEWERS MAINTAINED AND AMOUNT OF APPROPRIATION THEREFOR.



GENERAL REMARKS.

The appropriation for the maintenance of the Sewer Division for the year was \$350,000. This appropriation has had no substantial increase during the past ten (10) years, and during the present year the amount of work which could be completed for this sum has been substantially reduced by the passage of the eight-hour law, although in that time the amount of sewerage works to be maintained has been nearly doubled. If the present state of efficiency is to be maintained, the appropriation must, of necessity, be increased in the near future.

During the year especial attention has been given to the cleaning of sewers and catch-basins, many of which were so filled as to seriously impair their usefulness. The result of such cleanings has already been made apparent by the decrease in the number of complaints received by the Division, as well as by the amount of sludge received in the deposit sewers at the Pumping-station. Improvements are still possible in this line, and the work should be continued during the next year.

It will be seen that the amount of sewerage works built during the year as expressed in linear feet is somewhat smaller than for the last few years. The shortage is due to the following principal reasons:

First. The excessive amount of large-size brick sewers and surface drains built. The rapid development of certain suburban districts, and the connection of the surface drainage with the house sewers, has overcrowded the sewers, with the result that many districts are flooded during every rainstorm.

Such sewer systems should be relieved by the building of drains for surface water. The same effect is caused in old natural watercourses, and it has been the policy of the Division to apply as large an amount of the appropriations as possible to the construction of work for the relief of such cases.

By reason of the liberal appropriation of \$1,000,000 each year for sewers, a large proportion of the meritorious petitions for house sewers has been granted, and the sewers built, and in the future an increasing proportion of the annual amount will be available for the building of surface drainage structures, and the intercepting sewers necessary for connection with the various Metropolitan systems.

The more meritorious cases have already been referred to in the district reports.

Second. It is estimated that for the year the introduction

of the eight-hour law has reduced the amount of linear feet of sewers which would have been built if the force had been on an nine-hour basis by about 6,200 linear feet, and that the amount of other structures has been reduced in the same proportion. The effect of the eight-hour law has been to reduce the value of the work done under the appropriation of the Sewer Division by an amount which is estimated to be approximately \$18,000.

Third. The largely increased expenditures for land takings, construction work at Moon Island, and payments on pumping machinery now under contract, have greatly reduced the appropriation available for building sewers the present year.

The Metropolitan Sewerage Commission is now actively engaged in building a high-level sewer to accommodate portions of Roxbury, West Roxbury, Dorchester, and Brighton. When this is done and put in operation, the City of Boston will be assessed its portion of the cost (the assessment being based upon the territory which is figured as tributary to the high-level sewer). Before this territory can be drained into the high-level sewer a large amount of work must be done in building the necessary branch intercepting sewers, and, properly, these sewers should be completed and ready to be put into operation at the same time as the Metropolitan Sewer, otherwise the City will pay for service which it does not receive, as was the case in regard to East Boston and Charlestown, where the City had to pay its assessment for a number of years while receiving no benefit from the North Metropolitan Sewer, and is at present paying for connections for sewers which are not yet built, the fault being the City's own in not completing its connections. Work should be begun on these tributary high-level interceptors the coming year. There will be required 67,500 feet, being 12.8 miles of sewers, ranging in size from twelve inches to five feet in diameter.

A rough estimate of the cost of construction of this system of sewers is \$1,484,500, or in round numbers \$1,500,000, exclusive of land damages.

Respectfully yours,

GUY C. EMERSON,

Deputy Superintendent.

Financial Statement.

APPROPRIATIONS.	Balances on hand February 1, 1900.	Appropriations during the year.	Total Credits.	Expenditures during the year.	Balances on hand January 31, 1901.
Street Department, Sewer Division .....	.....	\$362,118 85	\$362,118 85	\$362,060 24	\$58 61
Sewerage Works	\$57,533 17	900,000 00	957,533 17	921,140 48	36,392 69
Stony Brook Improvement (Chap. 397, Acts 1899)	198,481 35	.....	198,481 35	198,481 35	.....
Totals	\$256,014 52	\$1,262,118 85	\$1,518,133 37	\$1,481,682 07	\$36,451 30

OBJECTS OF EXPENDITURES.

STREET DEPARTMENT, SEWER DIVISION.

Improved Sewerage Maintenance.

Pumping Station and Moon Island,	\$121,788 08	
Tow-boat	\$13,800 72	
Less paid by Sani- tary Division	6,710 74	
	<u>7,089 98</u>	\$128,878 06

*Pumping Station, Forest-avenue Section,
Dorchester.*

Maintenance	7,543 12
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Stony Brook.

Maintenance	5,265 38
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Miscellaneous Maintenance Charges.

Office and engineering force, salaries and ex- penses	15,156 27
Current expenses of yards, lockers, stables, etc.	\$83,418 98
Less amount earned by Depart- ment teams	<u>32,130 50</u>
	51,288 48
Repairing and cleaning catch-basins, sewers and general repairs	100,898 81
House connections, work for other Departments, incidental expenses, etc.	20,805 56
Hardware, tools, rubber goods, etc.	9,119 59
Telephones not included elsewhere	1,414 27
Stable, Eagle street, East Boston	1,853 23
Freeport street interceptor	<u>1,672 80</u>
	\$343,895 57
In excess of Sewerage Works Appropriation	15,454 67
Increase in stock at yards	2,651 39
Transferred to City Treasury	<u>58 61</u>
Total maintenance	<u><u>\$362,060 24</u></u>

STREET DEPARTMENT — SEWER DIVISION. 199

SEWERAGE WORKS.

Improved Sewerage Construction.

Pumping Station and Moon Island . . . \$157,835 82

Sewer Construction.

South Boston	\$74,660 92	
East Boston	32,227 62	
Charlestown	21,523 71	
Brighton	65,076 76	
West Roxbury	109,143 66	
Dorchester	231,812 20	
Roxbury	18,172 11	
City Proper	98,312 24	
		650,929 22

Miscellaneous Construction Charges.

Office and engineering force, salaries and ex- penses	101,277 82
Hardware, tools, rubber goods, etc.	24,274 94
New manholes	2,277 35

	\$936,595 15
Less amount paid from Sewer Division	15,454 67

Total	\$921,140 48
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Stony Brook Improvement.

Construction and engineering	\$198,481 35
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Recapitulation.

Street Department, Sewer Division	\$362,060 24
Sewerage Works	921,140 48
Stony Brook Improvement, Chapter 397, Acts of 1899	198,481 35
Total	\$1,481,682 07

Summary of Sewer Construction for the Twelve Months ending January 31, 1901.

DISTRICT.	Built by the City by Contract or Day Labor.	Built by Private Parties.	Total length built during the 12 months ending Jan. 31, 1901.
City Proper.....	3,968.29	268.00	4,231.29
East Boston.....	2,470.44		2,470.44
Charlestown.....	2,281.47		2,281.47
South Boston.....	4,292.73		4,292.73
Roxbury.....	4,056.64	3,656.84	7,713.48
West Roxbury.....	17,450.04	1,817.73	19,267.77
Dorchester.....	81,320.59	3,459.05	84,779.64
Brighton.....	12,420.72	6,236.66	18,657.38
Totals.....	78,255.92	15,436.28	93,692.20

Summary of Sewer Construction for five years previous to February 1, 1901.

	1896.	1897.	1898.	1899.	1900.
Built by the City by contract or day labor.....	116,008.25	134,324.98	203,139.68	99,772.15	78,255.92
Built by private parties...	37,825.92	38,969.14	9,525.99	17,955.05	15,438.28
Total number of feet built	153,834.17	173,294.07	212,665.67	117,727.20	93,694.20

Schedule of Sewers Built to Date in the City of Boston, February 1, 1901.

DISTRICT.	Total length built during the 12 months ending Jan. 31, 1901.	Length rebuilt and abandoned during the 12 months ending Jan. 31, 1901.	Additional length for 12 months ending Jan. 31, 1901.	
	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Miles.</i>
City Proper.....	4,331.29	2,141.00	2,090.29	0.40
East Boston.....	2,470.44		2,470.44	0.47
Charlestown.....	2,281.47		2,281.47	0.43
South Boston.....	4,292.73	724.17	3,568.56	0.68
Roxbury.....	7,713.48	55.00	7,658.48	1.45
West Roxbury.....	19,267.77		19,267.77	3.65
Dorchester.....	34,779.64	514.92	34,264.72	6.49
Brighton.....	18,657.38	12.42	18,644.96	3.53
Totals.....	93,694.20	8,447.51	90,246.69	17.09
Length built previous to January 31, 1900.....				510.66
Total.....				527.75
Length of intercepting sewer.....				24.12
Total.....				551.87
Total mileage of streets containing sewerage works.....				408.2

Catch-basins Built February 1, 1900, to January 31, 1901.

	Number.	
City Proper.....	43	1,051,176 linear feet of sewers flushed. 1,868 cubic yards material removed from sewers. 11,140 catch-basins cleaned; 30,773 cubic yards removed. 1,524 of these catch-basins were cleaned by contract at an average cost of \$3.32 per basin.
Roxbury.....	72	
Dorchester.....	101	
West Roxbury.....	66	
Brighton.....	42	
Charlestown.....	16	
East Boston.....	29	
South Boston.....	8	
Total.....	377	

STREET DEPARTMENT — SEWER DIVISION. 201

Report of Sludge Received in and Removed from the Deposit Sewer for Twelve Months Ending January 31, 1901.

1900.	Received.	Removed.	
February.....	707 cubic yards	765 cubic yards	
March.....	435 " "	1,190 " "	
April.....	721 " "	1,190 " "	
May.....	1,042 " "	1,065 " "	
June.....	814 " "	1,184 " "	
July.....	1,014 " "	1,828 " "	Sludge in sewers Feb. 1, 1900, 3,627 cubic yards.
August.....	1,212 " "	1,426 " "	
September.....	801 " "	1,075 " "	Sludge in sewers Feb. 1, 1901, 290 cubic yards.
October.....	1,365 " "	1,180 " "	
November.....	760 " "	1,081 " "	
December.....	447 " "	833 " "	
1901.			
January... ..	587 " "	925 " "	
	9,905 cubic yards	13,242 cubic yards	

Real Estate in Charge of the Sewer Division.

OWNED BY CITY.	Assessed Valuation.	
	Land.	Buildings.
Sewer yard, 678 Albany street, South End.....	\$56,400	\$3,000
Sewer yard, Columbus avenue, Roxbury.....	7,300	
Sewer yard, Rutherford avenue, Charlestown.....	13,000	4,000
Sewer yard, Massachusetts avenue, near Albany street, South End.....	56,400	3,000
Sewer yard, Western avenue, Brighton.....	8,600	5,500
Pumping station, Old Harbor Point, Dorchester...	98,000	300,000
Land, buildings and reservoirs at Moon Island and Squantum.....	19,500	4,800
Sewer yard, North Grove street, West End. (Occupied in common with other Divisions of the Street Department).....	66,720	28,000
Sewer yard, Child and South streets, West Roxbury. (Occupied in common with Paving Division).....	19,300	8,000
LEASED.		
Sewer yard, Revere street, West End. (Occupied in common with Paving Division. Leased from J. J. Costello).....	76,500	3,500
Sewer yard, Eagle street, East Boston. (Occupied in common with other Divisions. Leased from trustees of Glendon Company).....		
Sewer yard, Old Harbor street and Columbia road, South Boston. (Office building owned by Sewer Division. Leased from estate of Choate Burnham).....	4,800	3,200
Sewer yard, Gibson street, Dorchester. (Buildings erected by Sewer Division. Leased from trustees of Gibson School Fund).....	7,000	5,000

APPENDIX F.

REPORT OF THE DEPUTY SUPERINTENDENT
OF THE STREET CLEANING DIVISION.

921, 922, 923 TREMONT BUILDING,
BOSTON, February 1, 1901.

MR. B. T. WHEELER,

Superintendent of Streets :

DEAR SIR, — I respectfully submit the annual report of the expenditures, income, and operation of the Street Cleaning Division of the Street Department for the financial year ending January 31, 1901.

Consideration should be given to the fact that the enforcement of the eight-hour law during the year has entailed an additional expense of about \$27,000 on the Division; there has been employed on full time throughout the year, nevertheless, an average force of about three hundred and fifty men whose combined salaries and wages represent about 70% of the total amount of money expended during that period for all purposes. The result of this additional expense is shown to some extent by the tables which follow.

In March last the repair-shops at the South End yard were abolished; the shops of the Sanitary Division, adjacent, having been increased in capacity by the installation of electric power and introduction of many improvements, now perform all the work formerly done by both Divisions at this point at a considerable saving to the City.

The method of sweeping the business sections at night prevailed for some years after the establishment of this Division and was satisfactory in its operation, but for some unknown reason machine sweeping was discontinued in the West and North Ends in September, 1898, and the system of night sweeping, instead of being extended, as its merits would warrant, was practically abandoned. Convinced, after studying this feature of the work, that this method gave the best results, and caused the least inconvenience to the public, it has been substituted for day work and for hand-sweeping,

except by a patrol system, which is established to augment its efficiency. Streets throughout the entire street-cleaning territory are now machine swept by night, except under extraordinary conditions of temperature and weather. Patrol districts in consequence have been somewhat enlarged, since the patrolman finds his street clean for him in the morning, and it is only necessary that he bend his energy to keeping it in that condition during the day. With the extension of the patrol system during the coming year, as intended, the most satisfactory results for the amount of money expended will be obtained.

While there was some complaint made upon the establishment of this system by those whose conservatism remonstrates against what they are pleased to call a novelty and innovation, such complaints have now entirely ceased, and the public is, I think, satisfied that the method employed is for the greatest good of the greatest number.

Among the many problems which vex this Division there is none, perhaps, more difficult of solution than the prevention of the nuisance of paper-littered streets. No matter how well machines or push-cart men may broom a street surface and clean it of all that which is unsanitary, it presents an unsightly appearance if papers or rubbish of a similar character be thrown upon it. While it is apparently impossible for the police force to prevent the violation of the ordinances by the sweeping of house litter into the street, it is especially annoying to note the average citizen throwing his newspaper, empty boxes, and fruit peelings upon its surface, and this too in the presence of, or, at least, within the knowledge of, those whose duty it is to see that the City Ordinances are respected. There certainly is sufficient law to prevent this annoyance, and the remedy is in the hands of the Board of Police to apply; the duty of this Department, then, is to minimize as far as possible this annoyance, and to this end the paper patrol system has been organized and extended. A marked improvement at once followed its introduction, and although the cost of teaming thereby caused is in excess of that of previous years, the results have been commensurate, and the system should be still further extended.

In this connection, permit me to remind you of the ordinance you suggested for consideration to the City Council last October. To quote your language: "The Street Cleaning Division of this Department suffers expense and great annoyance because of the paper blown from open barrels upon its newly clean surfaces. I would suggest" (you

wrote) "that the Law Department prepare an ordinance which shall enable us to enforce the following rule: 'All papers, light waste, and other general refuse, must be placed in covered receptacles, separate from those used for the ashes and offal, or, if too bulky, must be tied in bundles, to prevent their being scattered, and must be protected from the weather until collected.'" The ordinance was drafted and the matter referred to the Committee on Public Improvements, where I trust it does not lie buried. If so, I hope it will be resurrected; for it is indisputable that much of the litter that fouls our streets comes from the barrels that are placed upon the sidewalks by storekeepers.

The force, which was established in East Boston immediately before I took charge of the Division has been slightly increased, and employed on full time during the year. This district was formerly visited twice a week by the Charlestown gang. It now receives similar care to other sections of the City, at a cost of about \$12,000. A new stable has just been opened, which accommodates the Sanitary, Paving, Sewer and Street Cleaning Divisions, and under this improved condition of things better results for the ensuing year are anticipated.

The work of the patrol, or push-cart men, has been already alluded to, and recommendation is made that this branch of the service, whose merits have long ago been fitly recognized, should be extended. There have been considerable additions to this force during the year and, in nearly every instance the men employed were all young and active.

It will soon become a question where the City may deposit its street sweepings. Many of the extensive low lands have been filled in; and in the suburban districts dependence is largely placed upon the owners of private property. The Charlestown dump will soon cease to be available, and the dumping scow at Fort Hill Wharf is not always able now to take all refuse carted to it; the teams have frequently had to leave the wharf and resume their haul, sometimes to a distant dump, and at increased expense.

Much misunderstanding between this Division and abutters on public alleys, regarding their care, developed during the early part of the year. The Public Alley Act of 1898 provided for the construction of these alleys by the Superintendent of Streets, and assessment of the cost thereof upon the abutters, but especially provided that—

"CHAP. 298, SECT. 2. Said city shall not be liable for any defect or want of repair in any public alley, nor be required to keep the same free from snow, but shall be required to

keep the same free from any substance which is liable to cause sickness or a nuisance.

“SECT. 3. Whoever drops or places and suffers to remain in any public alley, any snow or ice, or any rubbish or obstruction of any kind, shall be fined not exceeding fifty dollars for each offence.”

A butters seemed to be of the opinion that, notwithstanding the provisions of this Act, above quoted, they were at liberty to throw into the alley all kinds of house and store refuse, and that it was the duty of this Division to remove the same. The Act does not even place the duty of removing substances liable to cause sickness or a nuisance upon this Division, but by arrangement with the Board of Health this Division assumed the performance of this work.

The public alley does not have the same standing in law as the public highway, and the duties of this Department toward it are not the same. It is now, after construction, to all intents and purposes a private way, repairs to which, and removal of snow and ice from which, the City does not assume, but agrees only to keep it in a healthful condition.

There is imperative need of more and better stable facilities in the West End and Roxbury districts, which can only be obtained, in the West End particularly, by the construction of new City stables upon a comprehensive plan, occupying to advantage the land which is now covered with small stables, barns and sheds.

The property of this Division, rolling stock especially, is in excellent condition.

Respectfully yours,

FRANK H. HAYNES,

Deputy Superintendent.

FINANCIAL STATEMENT.

Appropriation, 1900-1901	\$330,000 00
Transferred from Bridge Division	9,747 23
Total amount of appropriation	\$339,747 23
Total amount of expenditures	<u>\$339,747 23</u>

OBJECTS OF EXPENDITURES.

Superintendence.

Salary of Superintendent	\$3,000 00
Office pay-rolls	4,244 88
Stationery	313 66
Printing	1,153 62
Board of horses, not mentioned elsewhere	708 23
Telephone service	470 91
	<u>\$9,891 30</u>

Machine Sweeping of Paved Streets.

This includes cost of sweeping, loading and removal of street dirt.

District 1, South Boston	\$16,470 67
District 2, East Boston	6,723 31
District 3, Charlestown	13,313 09
District 7, Roxbury	16,856 60
District 8, South End :	
Up-town gang	15,007 77
Down-town gang	38,855 50
District 9, Back Bay	7,289 22
*District 10, West End and North End	4,521 06
District 10, West End	15,298 22
District 10, North End	15,323 76
	<u>\$149,659 20</u>

Hand Sweeping.

District 10. West End and North End.

Bag-carriers, push-carts, teaming, etc.	\$5,479 73
Snow-work, not mentioned elsewhere	988 68
Superintendence	382 50
	<u>\$6,850 91</u>

Discontinued April 8, 1900.

* April 8, 1900, hand sweeping (see above) was discontinued and sweeping by machines substituted in the West and North Ends. The cost of sweeping in these two sections of District 10 is kept separate.

STREET DEPARTMENT — STREET CLEANING DIVISION. 207

Cleaning Gutters.

This includes cost of sweeping, loading and removal of street dirt.

District 1, South Boston	\$1,835 98
District 2, East Boston	4,094 62
District 3, Charlestown	3,178 87
District 7, Roxbury	5,828 55
District 8, South End :	
Up-town gang	4,113 01
Down-town gang	111 23
District 9, Back Bay	6,206 69
District 10, West End and North End	—
	<hr/>
	<u>\$25,368 95</u>

Total length of gutters cleaned 3,282.72 miles.

Average cost per mile (including *pro rata* cost of dump), \$7.95.

Cost of Maintaining Dumps.

District 1, South Boston	\$542 75
District 2, East Boston	104 87
District 3, Charlestown	579 60
District 7, Roxbury	668 05
District 8, South End :	
Up-town gang	557 03
Down-town gang	562 29
District 9, Back Bay	559 65
District 10, West End and North End	113 75
District 10, West End	218 40
District 10, North End	235 20
	<hr/>
	<u>\$4,141 09</u>

Removing Snow.

This includes labor on crossings, in streets, carting of snow, etc.

District 1, South Boston	\$580 99
District 2, East Boston	399 04
District 3, Charlestown	491 80
District 7, Roxbury	1,097 10
District 8, South End :	
Up-town gang	529 54
Down-town gang	3,462 76
District 9, Back Bay	1,141 17
District 10, West End and North End	1,013 36
District 10, West End	642 53
District 10, North End	695 40
	<hr/>
	<u>\$10,053 69</u>

See Patrol System and Hand Sweeping.

Miscellaneous.

This shows the cost of such work as may not be characterized the same in all districts.

District 1, South Boston	\$54 02
District 2, East Boston	48 31
District 3, Charlestown	116 20
District 7, Roxbury	334 29
District 8, South End :	
Up-town gang	79 76
Down-town gang	21 30
District 9, Back Bay	80 85
District 10, West End and North End	23 81
District 10, West End	152 07
District 10, North End	—
	<hr/>
	<u>\$910 61</u>

Patrolling by Districts.

This includes the cost of picking up and the removal of refuse papers, etc., from the streets.

District 1, South Boston	\$879 23
District 2, East Boston	764 84
District 3, Charlestown	798 00
District 7, Roxbury	1,551 38
District 8, South End :	
Up-town gang	49 74
Down-town gang	30 78
District 9, Back Bay	3 00
District 10, West End and North End	71 08
	<hr/>
	<u>\$4,148 00</u>

See Patrol System.

Public Alleys.

Labor and teaming	\$139 97
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Push-Cart Patrol System.

Superintendence, inspection, etc.	\$3,574 10
Push-carts — labor, teaming, etc.	41,336 15
Paper-patrolling	1,919 50
Stock	1,452 21
Snow-work	1,985 43
Holidays	2,255 32
Repairs at Station, 95 Columbus avenue	94 63
Sundries — repairs, etc.	2,113 17
	<hr/>
	<u>\$54,730 51</u>

Stable and Yard Expenses.

This includes the cost of the South End, West End, Roxbury, South Boston, Charlestown and East Boston stables, as follows:

Superintendence of stables	\$1,396 20
Labor, including the cost of feeders, hostlers, broom-makers, watchmen, yardmen, messenger, etc.	24,335 28
Cart and carriage repairs	4,202 17
Harness repairs	1,156 19
Horseshoeing	3,070 41
Sweeping machine repairs	4,154 47
Stable and shed repairs	384 17
Street-car tickets	550 00
Tool repairs	59 10
Veterinary services and medicine	1,107 79
Board and care of horses, not mentioned elsewhere	136 91
Hay and grain in stock and paid for	198 59
	<hr/>
	\$40,751 28

See Patrol System.

Stock Account.

Broom stock purchased	\$6,866 84
Harnesses and horse furnishings purchased	595 40
*Horses purchased	5,151 83
Tools purchased	639 35
Sweeping machine purchased	1,100 00
Bag-carriers	20 25
	<hr/>
	\$14,373 67

Miscellaneous.

Holidays	\$11,890 91
Scow (cost of disposal at sea of 35,534 loads of street dirt)	8,284 14
Sundries	1,162 33
Royalty on sweeping machines	588 33
Annuity	300 00
Ellis reward	500 00
	<hr/>
	\$22,725 71

* See Patrol System.

GENERAL RECAPITULATION OF EXPENSES.

Superintendence	\$9,891 30
Machine sweeping of paved streets	149,659 20
Hand-sweeping	6,850 91
Cleaning gutters	25,368 95
Maintaining dumps	4,141 09
Removal of snow and ice	10,053 69
Miscellaneous work	910 61
Paper-patrolling	4,148 00
Cleaning public alleys	139 97
Patrol system, push-carts	54,730 51
Stable and yard expenses	40,751 28
Stock account	14,373 67
Miscellaneous	22,725 71
	<u>\$343,744 89</u>

Of the above amount, the sum of \$3,997.66 was paid by other Departments and Divisions for work done, thus making the net expenses of this Division, as shown in the financial statement, \$339,747.23.

INCOME.

Amount of bills deposited with the City Collector during the financial year ending January 31, 1901, \$4,188.35.

Table showing the Cost per Mile of Machine Sweeping, etc., of Paved Streets in each District, Exclusive of Supervision and other Expenses.

DISTRICTS.	Miles.	Cost of Cleaning.	Pro Rata Cost of Dump.	Total Cost.	Cost per Mile.
1.....	1,193.05	\$16,470 67	\$488 40	\$16,959 07	\$14 21
2.....	572.77	6,723 31	64 85	6,788 16	11 85
3.....	1,041.81	13,313 09	467 87	13,780 96	13 22
7.....	889.46	16,856 60	495 65	17,352 25	19 50
8 Up-town.....	1,294.75	15,007 77	437 20	15,444 97	11 92
8 Down-town.....	4,829.39	38,855 50	560 68	39,416 18	8 16
9.....	611.45	7,289 22	302 26	7,591 48	12 41
10 West and North Ends.....	398.26	4,521 06	113 75	4,634 81	11 13
10 West End.....	1,940.24	15,298 22	218 40	15,516 62	7 99
10 North End.....	1,507.35	15,323 76	235 20	15,558 96	10 32
	14,278.53	\$149,959 20	\$3,384 26	\$153,043 46	

Average cost per mile of cleaning streets in districts, exclusive of supervision, \$10.71.

STREET DEPARTMENT — STREET CLEANING DIVISION. 211

Table showing the Cost per Mile of Machine Sweeping, etc., of Paved Streets in each District, Including Supervision, Labor, Yard and Stable Expenses.

DISTRICTS.	Miles of Streets Cleaned.	Cost of Cleaning Streets.	59% of the Total Cost of Supervision.	73% of the Cost of Yard and Stable Expenses.	Total Cost.	Total Cost per Mile.
1.....	1,193.05	\$16,959 07	\$646 68	\$3,280 41	\$20,886 16	\$17 51
2.....	572.77	6,788 16	258 85	1,313 05	8,360 06	14 59
3.....	1,041.81	13,780 96	525 50	2,665 67	16,972 13	16 29
7.....	889.46	17,352 25	661 68	3,356 48	21,370 41	24 02
8 Up-town...	1,294.75	15,444 97	588 95	2,987 55	19,021 47	14 61
8 Down-town...	4,829.39	39,416 18	1,503 02	7,624 34	48,543 54	10 05
9.....	611.45	7,591 48	289 48	1,468 43	9,349 39	15 23
10 West and North Ends...	398.26	4,634 81	176 73	896 52	5,708 06	14 33
10 West End..	1,940.24	15,516 62	591 68	3,001 41	19,109 71	9 84
10 North End..	1,507.35	15,558 96	593 29	3,009 60	19,161 85	12 71
	14,278.53	\$153,043 46	\$5,835 86	\$29,603 46	\$188,482 78	

Average cost per mile of cleaning the streets in districts, including supervision, etc., \$13.20.

Table showing the Number of Loads of Street Dirt Removed.

DISTRICTS.	Number of loads of dirt removed.	Cost per load of cleaning streets and removing to dumps, including foreman's superintendence.
1.....	22,101	\$0 82
2.....	6,446	1 67
3.....	9,519	1 73
7.....	11,985	1 89
8 { Up-town Gang.....	9,873	1 93
8 { Down-town Gang.....	19,137	2 03
9.....	6,961	1 93
10 { West End and North End.....	2,156	2 09
10 { West End.....	7,410	2 06
10 { North End.....	7,843	1 95
	103,431	
Removed by hand-sweeping force up to April 8, 1900.....		Barrel and Bag Loads.
Removed by push-cart, patrol system.....	1,298	3,793
Removed by district push-carts.....	6,806	108,213
Removed by paper patrol.....	2,486	18,666
Totals.....	114,021	130,672

Total number of cart loads removed..... 114,021
 Total number of barrel and bag loads removed..... 130,672

Thirty-five thousand, five hundred and thirty-four (35,534) loads of these street sweepings (or 31 per cent. were delivered at the dumping scow at Fort Hill Wharf, the towing of which to sea cost twenty-three (23) cents per load.

Public Waste-barrels.

Total number of waste-barrels emptied . . .	14,241
Total number of subway barrels emptied . . .	1,541
	<hr/>
	15,782
	<hr/>

SUMMARY.

Miles of paved streets cleaned	14,278.53
Miles of gutters cleaned	3,282.72
Loads of street dirt removed	111,535
Loads of paper and refuse removed	2,486
Push-cart barrels emptied	130,672
Waste-barrels emptied	14,241
Subway barrels emptied	1,541

PROPERTY OCCUPIED BY THE STREET CLEANING DIVISION.

South Boston.	Lease of stable, corner of Vale and Burnham streets.	
East Boston.	Part of stable, on East Eagle street.	Leased.
Charlestown.	" " " " Rutherford avenue.	City stable.
Roxbury.	" " " " Highland street.	" "
South End.	" " " " 650 Albany street	" "
West End.	" " " " North Grove street	" "
Back Bay.	Lease of building, 95 Columbus avenue.	

APPENDIX G.

REPORT OF THE DEPUTY SUPERINTENDENT
OF THE STREET WATERING DIVISION.

904-905 TREMONT BUILDING,
BOSTON, February 1, 1901.

MR. B. T. WHEELER,

Superintendent of Streets :

DEAR SIR,—I respectfully submit the annual report of the Street Watering Division of the Street Department for the financial year ending January 31, 1901.

Public streets have been watered during the past year under authority given in the Legislative Acts of 1897, chapter 419.

The work of the year has but one precedent for comparison, 1899, the only other year in which all public streets were watered under the assessment law by districts. The assessments, as made in 1899, were found to be inequitable in the division of the districts, and in the rates charged. Changes were made accordingly in district lines, and the rate of assessment was increased in the City Proper, Back Bay, and South End, and decreased in all other sections of the City. The results have shown that the assessment by the districts of the past year is as nearly equitable as it seems possible to make such a system of taxation.

The special tax for street watering is justly unpopular, because of the inherent difficulty in the just apportionment of such a tax. Admittedly street watering is a necessary public service for the health and comfort of the people. It is also good municipal economy, in that it preserves the roadbeds of the streets. The expense should be paid, however, from the general tax levy, and the fact that the Board of Aldermen has adopted the recommendation of the Mayor and ordered the watering of the streets at the public expense shows general agreement in this view of the question, and makes further reference to the subject of assessment for this service unnecessary.

The season of 1900 opened early, and was very dry until the middle of September. Carts were employed in the Back Bay on March 9, and in all parts of the city April 1. The regular season did not close until November 15, and some

carts were worked in the Back Bay and South End until December 9. Cold weather prevented regular service after that date, but occasional watering was done until January 9, 1901.

The total miles of streets watered was 450, and the number of carts employed in the work was 234. This was an increase of $36\frac{1}{2}$ miles in streets, and an increase of three in the number of carts over last year. The hours of labor were reduced from nine to eight, as compared with the working day of 1899.

The work was supervised by 23 tallymen, who received their instructions from the Deputy Superintendent each morning before working the carts; their earnest and efficient work was appreciated, and it would seem to warrant the claim that the bicycle-tallyman service is the best method yet adopted for the supervision of street watering.

There are in use about 500 standpipes, located at convenient distances, and maintained by this Division. From them water is taken also by the Paving Division, the Street Cleaning Division, and the Park Department. The estimated amount of water used for street watering during the past year was 483,337,300 gallons. The standpipes were kept in excellent condition. In addition to painting them, the cart stand at 130 of them was paved this year, and in the City Proper, most of the posts were fitted with a swivel joint, so that the arm may be swung parallel to the curb when not in use. Many arms have been broken by high loaded teams, and this improvement was designed to prevent such occurrences. It has been the endeavor to make the standpipes as unobjectionable as possible to abutters, by keeping them in good condition.

Very few complaints were received during the season, which leads to the belief that the work was generally satisfactory, and that the Division is in efficient working order.

Respectfully yours,

FREDERICK HAMMOND,
Deputy Superintendent.

FINANCIAL STATEMENT.

Appropriation (authorized to expend in anticipation of, and to be met by, assessments)	\$175,000 00
Expenditures	174,742 45
Balance	<u>\$257 55</u>

STREET DEPARTMENT — STREET WATERING DIVISION. 215

OBJECTS OF EXPENDITURES.

Salaries and labor	\$14,734 31
Teaming	142,222 25
Water-posts, repairs, etc.	4,088 97
Paving Division	3,500 00
Board of horses	664 24
Shoeing	93 00
Veterinary services and medicine	39 39
Harness and supplies	90 96
Telephones	180 53
Bicycles, repairs, etc.	799 26
Printing	629 49
Stationery	141 58
Carts, repairs, etc.	754 43
Horse hire	39 00
Assessments, expense of levying	6,424 99
General supplies	340 05
Total	<u>\$174,742 45</u>

Objects of Expenditures, Classified by Districts, from February 1, 1900, to January 31, 1901.

ASSESSMENT DISTRICTS.	Teaming.	Labor.	Maintenance.	Totals.
District One.....	\$42,534 50	\$2,949 58	\$6,341 31	\$51,825 39
District Two.....	76,145 01	5,056 44	12,487 49	93,688 94
District Three.....	23,542 74	1,685 48	3,999 90	29,228 13
Totals	<u>\$142,222 25</u>	<u>\$9,691 50</u>	<u>\$22,828 70</u>	<u>\$174,742 45</u>

ASSESSMENT DIVISIONS.

The Street Watering Districts of 1899 were altered and the rate of assessment changed on lines suggested by experience as follows :

STREET WATERING DISTRICTS.

		Rate of Assessment per Linear Foot of Frontage.
District One	{ Back Bay, South End, City proper, }	. . . . . 8 cents
District Two	{ South Boston, East Boston, Charlestown, Brighton, West Roxbury, portions of, Dorchester, " " Roxbury, }	. . . . . 4 cents
District Three	{ West Roxbury, portions of, Dorchester, " " }	. . . . . 3 cents

ESTIMATED INCOME BY DISTRICTS.

	Amount.
District One	\$62,482 16
District Two	98,723 76
District Three	27,761 49
Total	<u>\$188,967 41</u>

ASSESSMENTS.

Deposits, abatements, and collections for the year ending January 31, 1901:

Deposited with City Collector, {	1900 \$189,163 94
	1899 31 76
	1898 9 87
	<u>\$189,205 57</u>

Abatements to Jan. 31, 1901, {	1900 \$2,695 00
	1899 1,589 73
	1898 367 30
	<u>\$4,652 03</u>

Collections to Jan. 31, 1901, {	1900 \$148,176 31
	1899 40,911 74
	1898 2,259 89
	<u>\$191,347 94</u>

Uncollected January 31, 1901, {	1900 \$38,292 63
	1899 900 30
	1898 198 36
	<u>\$39,391 29</u>

MILES OF STREETS WATERED.

The distance in miles of streets watered during the past year is as follows:

	Miles.
Frontages as assessed	395.50
Watered by special contract	3.50
Intersections of streets (no income)	20.00
Public property (no income)	20.50
Cemeteries (no income)	4.50
Bridges (no income)	2.50
Railroad locations (no income)	3.50
Total	<u>450.</u>

This is an increase in mileage since 1899 of $36\frac{1}{2}$ miles.

STREET DEPARTMENT — STREET WATERING DIVISION. 217

Distribution of Carts showing Entire Amount of Work Done.

DISTRICT.	Hired Carts.	Total Carts.	Number Miles Covered.	Average per Cart.
One..... { Back Bay.....	20	65	89.15	1.37
{ South End.....	17			
{ City Proper.....	28			
Two..... { South Boston.....	20	128	262.00	2.05
{ East Boston.....	13			
{ Charlestown.....	11			
{ Brighton.....	20			
{ West Roxbury.....	5			
{ Dorchester.....	22	37		
{ Roxbury.....	37			
Three.... { West Roxbury.....	26	41	98.85	2.41
{ Dorchester.....	15			
Totals.....		234	450.00	1.94

Location of Water Posts by Districts.

DISTRICT.	YEAR.					Electric Hydrants.
	1891.	1897.	1898.	1899.	1900.	
South Boston.....	23	28	35	38	39	
East Boston.....	16	34	41	42	42	
Charlestown.....	19	20	20	21	22	
Brighton.....	25	44	47	50	48	
West Roxbury.....	50	67	75	86	81	
Dorchester.....	61	83	88	99	100	
Roxbury.....	53	68	76	80	73	
City Proper.....	24	53	69	74	68	5
Totals.....	271	397	451	490	473	5

NOTE. — Seventeen standpipes were transferred to the Park Department when it assumed care of such public ways as Commonwealth avenue. They were carried in the above table until this year. A census of the posts was taken during the year, and several errors in the list, as reported formerly, have been corrected. The tabulation for 1900 is accurate. During the past year 3 posts were relocated, 3 posts abandoned, and 17 new posts erected.

The Division is indebted to Mr. J. W. Smith, Local Forecast official, for daily weather reports.

APPENDIX H.

REPORT OF THE COMMISSIONERS FOR THE
BOSTON AND CAMBRIDGE BRIDGES.

CANAL OR CRAIGIE'S BRIDGE.

New timbers were placed the whole length of the outer side of the draw, and a new sidewalk of two-inch plank laid on both sides of the draw for the entire length. Hard pine timbers were placed on draw pier, and the surface was covered with two-inch plank.

The end of the draw on the Boston side was in bad condition, and iron plates were placed under the bearing of the wheels and new timber put in where necessary. The draw and its timber support will have to be rebuilt in a few years. It requires a close inspection at all times to keep it in place and to avoid accidents. The travel over this bridge by teams is increasing, some carrying very heavy loads; there are about ten thousand a day. The draw being so very narrow, cars and teams cannot pass over it together, and at times a blockade is thus created, especially after the draw is opened.

The timber and flooring on the pier at the rear of the drawtender's house is so much decayed that it will have to be replaced next summer.

Next year part of the roadway at each end of the bridge will have to be repaired, and the draw and fences will need painting. The drawtender and assistants keep the draw and draw pier free from ice and snow, sweep the sidewalks and make all ordinary repairs on machinery, etc.

HARVARD BRIDGE.

In April and May of this year the roadway for the entire length of the bridge and draw was newly sheathed with two-inch spruce plank, planed on one side to an even thickness. While doing this work the Boston Elevated Railway Com-

pany laid new rails, of a better kind than the old ones, the whole length of the bridge, and sheathed between the tracks and in the tracks. The work was done at night so as not to interrupt travel; there was very little blockade and no accidents. The work of the company was very satisfactory and was quickly done.

The four-inch planking of the deck under the sheathing on the roadway of the bridge was decayed in many places, and had to be renewed with new four-inch plank. This will have to be done yearly to keep it safe. Cost of sheathing the roadway was \$3,187, Boston paying one-half. While doing the work the best of the old plank we saved, and stored on the pier to be used this winter for patching.

Teams carrying heavy loads passing over the draw broke some of the timbers in the roadway; these were replaced with new ones.

A gale of wind that passed over the bridge, July 18, raised the asphalt sidewalk on the up-stream side of the bridge almost the whole length. It looked as if it would have to be taken up and a new sidewalk put in its place, which would cost over three thousand dollars; it was afterwards decided to replace it, and fill the cracks and joints with cement. This was done by the drawtenders employed on the bridge. With care, it will last some years, or till such time as the flooring under it will have to be renewed.

The sidewalks on the draw, and some of the timbers to support the same, were so much decayed that it was necessary to replace them with new material. New sidewalks were laid with hard pine plank, two inches thick, planed one side. Parts of the capping on the piers connected with the draw were renewed with hard pine timber.

All the ironwork from the Boston end of the bridge to the draw has been scraped and thoroughly painted. It is now in good condition, and will last some years. The zinc cap and woodwork, outside of the fence the entire length of the bridge, has been painted.

The traffic is increasing so fast, and so much heavy teaming passes over the bridge, that it is necessary to clean it twice a week now instead of once. This bridge is of unusual benefit to the cities of Boston and Cambridge, as it is in a beautiful location, and is much used in summer as a promenade.

The drawtender and assistants do all ordinary repairs, look after the machinery to run the draw, clean the globes on the electric lights, clean the sidewalks and piers from snow and ice, and make all necessary repairs.

PRISON POINT BRIDGE.

A house, 12 by 14 feet, one story high, fitted up with bunks, etc., was built for the drawtenders to occupy. Four-inch plank were put on bridge and draw and it was sheathed over all with 2-inch plank; painted house inside and outside by labor of the drawtenders.

This bridge and draw is in such poor condition that it is a constant care to keep it safe for travel. There are a great many vehicles passing over it. It was feared at one time that it would have to be closed up; to do so would be a great hardship to the teamsters, as they would have to go a mile or two out of their way to get to Charlestown. The Boston & Maine Railroad Company was notified last summer that the Cities of Boston and Cambridge would not be responsible for any accident that might occur because of its condition. The Boston & Maine Railroad Company is expected to commence work this summer on the overhead street and bridge, running from Bridge street, Cambridge, to Charlestown, to abolish the grade crossings. Before commencing work on the street the company will build a temporary bridge and draw further up stream.

The drawtenders keep the bridge free from snow and ice in winter, at other times they sweep the bridge weekly and make all ordinary repairs.

TEMPORARY WEST BOSTON BRIDGE.

The sheathing on this bridge was in such bad condition that it was necessary to replank the surface the entire length with 2-inch spruce plank. This will have to be done at least once each year, because of the narrowness of the bridge and the heavy teaming passing over it. The traffic over this bridge is increasing. The machinery for moving the draw is a great improvement over the power that was used to move the draw on the old West Boston bridge.

The drawtender and assistants take care of the draw machinery and keep it in good condition. They also remove snow and ice from the sidewalk and draw piers, and make all the necessary repairs.

CAMBRIDGE STREET BRIDGE.

New deck planks were put in and the bridge and draw on Boston side sheathed; new caps were put on piers, piles spliced near draw, and the fender guard repaired with hard

pine timber, and hard pine floors were laid in drawtender's houses. The houses were painted inside and outside by the drawtenders. They also sweep the bridge once a week, and keep the bridge and piers free from snow and ice in winter, and keep the machinery in good running order, and make all ordinary repairs.

ESSEX STREET BRIDGE.

The roadway was sheathed on both sides where necessary with 2-inch plank; on the draw pier new caps were placed and the pier was covered with 2-inch plank.

The drawtenders sweep the bridge once a week, and make all ordinary repairs.

NORTH HARVARD STREET BRIDGE.

A small building, 6 by 6 feet to hold coal, was built, and the drawtender's house was sheathed inside and shingled; new windows and doors were put in and a new floor laid; the roof and inside and outside of house was painted; the bridge and draw sheathed; all the fence on bridge and draw painted; and the bridge cleaned once a week. This work was done by the drawtenders on the bridge, who also made other repairs, without additional expense to the two cities.

WESTERN AVENUE BRIDGE.

New deck plank were put on the bridge and draw where necessary, and the whole sheathed with two-inch plank. The draw piers were repaired, and new ringbolts were secured to the pier for vessels to fasten to. This bridge is cleaned once a week, and all ordinary repairs are made by the drawtenders. The drawtenders employed to take care of this bridge also have the care of Cambridge-street bridge.

IN GENERAL.

The usual statement is appended showing the number of draw openings and the number of vessels which passed through.

The amount of revenue received for rents, dockage, etc., during the year, has been \$784.70; one-half of which has been paid to each city.

Number employees January 31, 1901 — 22.

The following is a statement of the payments made by the City of Boston on account of the Boston and Cambridge bridges from February 1, 1900, to January 31, 1901.

Amount of appropriation for financial year

1900-1901	\$18,500 00
Expended to January 31, 1901	17,353 27

Unexpended balance February 1, 1901	<u>\$1,146 73</u>
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Revenue, February 1, 1900, to January 31, 1901.

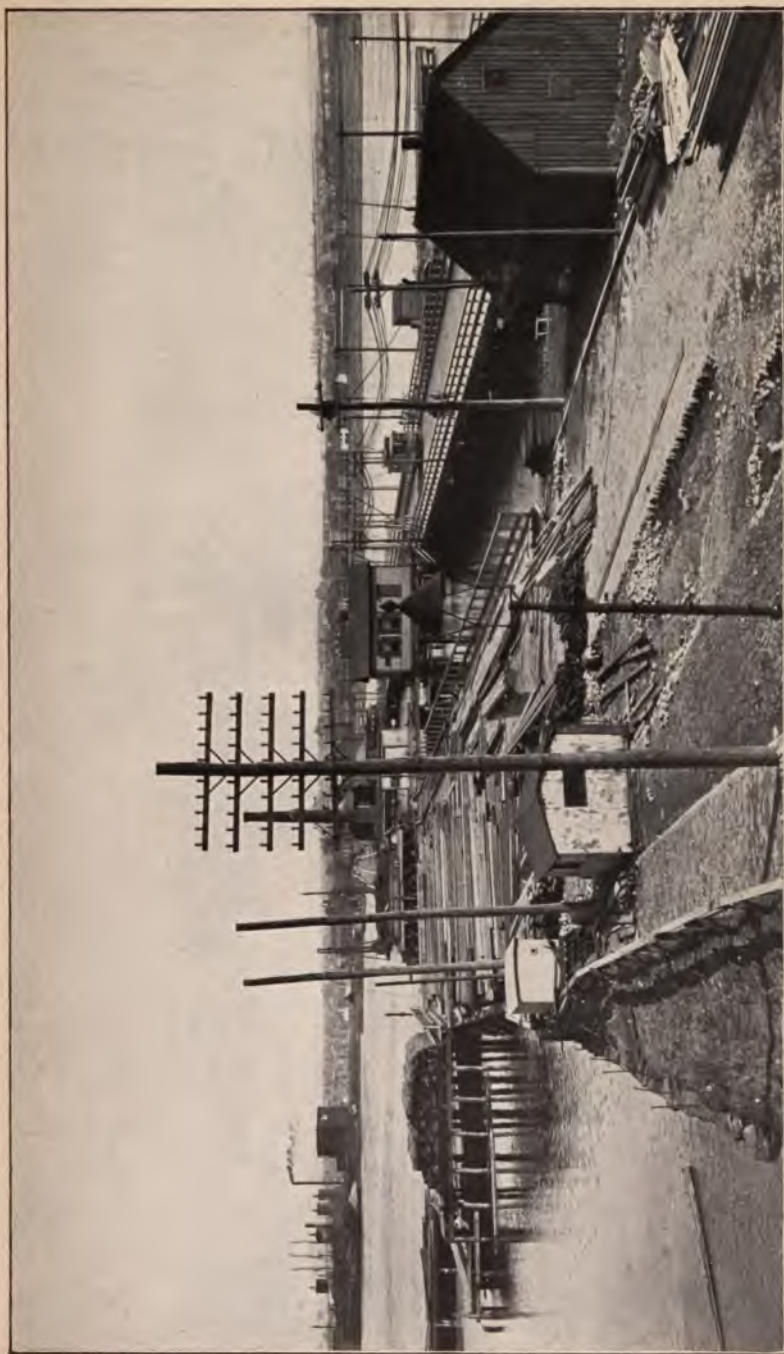
Date.	L. B. 4 & 5 Pages.	Received from	Total.	One-half Boston to City Collector.	One-half Cambridge to Wm. J. Marvin, Commissioner.
1900.					
February 16...	4-482	Boston Elevated Railway Co..	\$373 70	\$186 85	\$186 85
August 17.....	5-7	Wharfage, etc.....	361 00	180 50	180 50
December 11..	5-41	Rents.....	50 00	25 00	25 00
		Totals.....	\$784 70	\$392 35	\$392 35

Classification of Expenses.

	Canal or Craigie's.	Harvard.	Prison Point.	West Boston.	Cambridge Street.	Essex Street.	North Harvard Street.	Western Avenue.	General Account.	Totals.
Salaries	\$1,922 52	\$1,419 84	\$902 80	\$1,719 79	\$547 23	\$670 09	\$555 56	\$547 23	\$250 00	\$8,454 79
Electric light	308 63	630 00	.....	601 78	50 00	226 83	.....	50 00	.....	1,867 24
Replanking roadways.....	.....	1,568 50	.....	.....	.....	.....	.....	.....	.....	1,568 50
Lumber.....	344 07	312 33	163 29	26 09	160 21	143 16	106 86	48 15	.....	1,304 31
General repairs.....	271 53	214 99	177 82	25 74	91 37	64 62	6 55	41 24	.....	983 86
Paint and painting.....	8 25	668 95	1 90	.....	4 50	.....	4 82	.....	.....	676 42
Inspection, 1900.....	115 00	170 00	80 00	.....	52 50	40 00	80 00	57 50	.....	525 00
Gas light .....	.....	480 00	.....	.....	.....	.....	.....	.....	.....	480 00
Cleaning bridges.....	148 75	111 00	.....	176 75	.....	.....	.....	.....	.....	436 50
Iron work	82 22	86 58	80 49	.....	12 09	7 58	7 81	19 02	.....	285 79
Fuel	135 70	20 40	23 80	40 71	6 28	23 08	4 94	.....	.....	254 91
Electric current.....	.....	150 00	.....	.....	.....	.....	.....	.....	.....	150 00
Sundries.....	31 48	46 57	12 84	17 64	5 59	10 75	15 10	.....	.....	139 95
Tools and hardware.....	48 76	12 67	11 40	3 51	23 21	55	29 16	.....	.....	129 26
Watering roadways.....	31 00	.....	.....	.....	.....	.....	.....	.....	.....	31 00
Paving	16 04	.....	.....	.....	.....	.....	.....	.....	.....	16 04
Electric fixtures and repairs.....	.....	14 84	.....	.....	.....	.....	.....	.....	.....	14 84
Travelling expenses.....	.....	.....	.....	.....	.....	.....	.....	.....	50 00	50 00
Printing and stationery.....	.....	.....	.....	.....	.....	.....	.....	.....	40 25	40 25
Telephone service.....	.....	.....	.....	.....	.....	.....	.....	.....	19 61	19 61
Totals.....	\$3,463 93	\$5,919 72	\$1,854 14	\$2,612 01	\$833 08	\$1,186 87	\$700 82	\$743 14	\$359 86	\$17,353 27

Number of Times the Draws in the Boston and Cambridge Bridges have been Opened, and the Number of Vessels which have Passed through for the Year Beginning February 1, 1900, and ending January 31, 1901.

DATE.	CANAL OR CRAIGIE'S.		HARVARD.		PRISON. POINT.		WEST BOSTON.		CAMBRIDGE STREET.		ESSEX STREET.		NORTH HARVARD STREET.		WESTERN AVENUE TO CAMBRIDGE.	
	No. of draw open.	No. of vessels passing through.	No. of draw open.	No. of vessels passing through.	No. of draw open.	No. of vessels passing through.	No. of draw open.	No. of vessels passing through.	No. of draw open.	No. of vessels passing through.	No. of draw open.	No. of vessels passing through.	No. of draw open.	No. of vessels passing through.	No. of draw open.	No. of vessels passing through.
1900																
February	95	121	9	10	28	46	8	10	8	10	8	10	6	7	6	7
March	261	283	69	85	63	80	48	86	24	45	26	45	12	21	18	30
April	189	272	79	95	45	75	61	104	41	70	39	70	27	50	36	61
May	241	360	138	126	60	90	79	123	74	133	68	124	38	64	56	111
June	266	461	147	156	49	83	86	162	61	98	81	218	14	23	48	78
July	254	387	151	159	35	53	99	218	55	82	93	346	28	43	38	57
August	323	523	150	199	72	117	102	165	74	114	86	176	30	46	64	100
September	376	587	128	134	59	98	91	140	62	96	53	96	22	33	48	73
October	287	429	101	109	81	139	78	116	38	50	42	65	13	19	20	29
November	269	440	60	67	32	46	51	78	27	39	23	44	17	20	19	27
December	229	447	75	95	52	86	60	101	52	81	51.	82	13	29	32	54
January, 1901	220	434	80	89	61	99	28	45	10	15	10	15	4	6	10	15
Totals	3,020	4,764	1,137	1,274	686	1,007	731	1,353	596	883	590	1,391	929	963	397	641



MALDEN BRIDGE, SHOWING TEMPORARY BRIDGE ON THE RIGHT.

[illegible]

APPENDIX I.

CITY OF BOSTON, ENGINEERING DEPARTMENT,
50 CITY HALL, February 1, 1901.

MR. B. T. WHEELER,

Superintendent of Streets:

SIR,—I herewith submit the following report of the work done for the Street Department during the year ending January 31, 1901.

The total quantities of work done and measured are as follows:

Edgestones set, 23,562 linear feet; gutter paving laid, 7,837 square yards; brick sidewalks laid, 735 square yards; crushed stone sidewalks constructed, 7,776 square yards; artificial stone sidewalks laid, 47,698 square feet; coal tar concrete sidewalks laid, 1,733 square yards; flagging crosswalks laid, 818 square yards; macadam surface (6 inches thick), 28,072 square yards; Telford (8 inches thick), 1,989 square yards; macadam (4 inches thick), 1,989 square yards.

In addition to the above, measurements were made of work as follows:

Square yards coal tar concrete walk, 489; square yards of artificial stone walk, 16,541; linear feet of edgestone set and reset, 264,982; square yards block-stone paving and crossings laid and relaid, 161,428; square yards round-stone paving relaid, 61,356; square yards brick paving laid and relaid, 147,863; square yards asphalt blocks laid, 2,377.

The following statement gives the details of work done:

ASSESSMENT STREETS.

The following streets were constructed under Chapter 323 of the Acts of 1891, and acts in amendment thereof or in addition thereto:

Aberdeen street, Beacon street to Brookline branch of Boston & Albany Railroad, is about 385 feet long. The contract for constructing the surface of this street and for building retaining wall, board fence and bulkhead was awarded to J. O'Brien & Son. Work under this contract was begun February 8, 1900, and completed August 21, 1900. Crushed stone, straight edgestones, and gutter blocks were furnished by the City and hauled to the

site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor. A contract for laying the artificial stone sidewalks was awarded to Taylor, Carr & Andrews. Work under this contract was begun July 9, 1900, and completed August 21, 1900.

Alexander street, from Alexander street, southerly, about 611 feet. The contract for constructing the surface of this street was awarded to James McGovern. Work under this contract was begun October 25, 1899, and substantially completed November 25, 1899 (a small amount of work required to finish roadway and sidewalks was done during season of 1900). It is a 6-inch macadam road, with brick and crushed stone sidewalks. Crushed stone, gutter blocks and straight edgestones were furnished by the City, and hauled to the site of the work by the contractor; circular edgestones and bricks were furnished on the work by the City, and flagging for crosswalks by the contractor.

Annabel street, Columbia road to Sumner street, is about 429 feet long. The contract for constructing the surface of this street was awarded to James McGovern. Work under this contract was begun November 14, 1899, and completed May 8, 1900. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, gutter blocks and straight edgestones were furnished by the City, and hauled to the site of the work by the contractor; and circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor.

Ashley street, Breed street to Walley street, is about 641 feet long. A contract for filling this street to sub-grade was made with H. & D. Burnett on November 20, 1899, at the rate of 44 cents per cubic yard, measured in place. Work under this contract was begun December 4, 1899, and completed March 24, 1900. Total amount of filling deposited was 7,825 cubic yards.

Bennington street, Chelsea street to Belle Isle Inlet, is about 10,621 feet long. A contract for depositing about 82,000 cubic yards of filling in this street was awarded to Jones & Meehan, November 20, 1899 at the rate of 53 cents per cubic yard, measured in place. Work under this contract was begun January 16, 1900, and is still in progress; 100,400 cubic yards of filling were deposited before February 1, 1901.

Plans and specifications have been prepared for extending the abutments of the bridge (formerly Leyden street bridge) over the Boston, Revere Beach & Lynn Railroad so as to widen the existing bridge. Plans have also been made for a wooden bulkhead on the northerly line of the railroad for supporting the filling of the street.

Blandford street, Commonwealth avenue to the Boston & Albany Railroad, is about 399 feet long. A contract for depositing about 15,000 cubic yards of filling in this street was awarded to the Boston & Albany Railroad Company, December 27, 1899, at the rate of 45 cents per cubic yard, measured in the bank. Work under this contract was begun January 3, 1900,

and completed May 9, 1900. Total amount of filling deposited was 10,400 cubic yards.

Chiswick road, Chestnut Hill avenue to Englewood avenue, is about 2,046 feet long. The contract for constructing the surface of this street was awarded to Collins & Ham. Work under this contract was begun September 10, 1899, and substantially completed December 28, 1899 (a slight amount of surfacing being required to finish roadway and sidewalks during season of 1900). It is a 6-inch macadam road with crushed stone sidewalks, without edgestones and with "hip" gutters. Crushed stone and gutter blocks were furnished by the City, and hauled to the site of the work by the contractor, and flagging for crosswalks was furnished by the contractor.

Columbia road. During the year, under the contract with Simon J. Donovan, dated October 25, 1898, for grading that portion of Columbia road between Atlantic and I streets, there have been deposited 110,078 cubic yard of filling. The work is not yet completed.

Congreve street, South street to Centre street, is about 1,409 feet long. The contract for constructing the surface of this street was awarded to William Finneran. Work under this contract was begun November 4, 1899, and completed July 7, 1900. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, gutter blocks and straight edgestones were furnished by the City, and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor.

Cummington street, Blandford street to Avon street, is about 1,186 feet long. A contract for depositing about 54,000 cubic yards of filling in this street was awarded to the Boston & Albany Railroad Company, December 27, 1899, at a rate of 45 cents per cubic yard, measured in the bank. Work under this contract was begun January 3, 1900, and completed May 9, 1900. Total amount of filling deposited was 43,292 cubic yards.

Custer street, Woodman street to Arnold Arboretum is about 509 feet long. The contract for constructing the surface of this street was awarded to Philip Doherty. Work under this contract was begun May 14, 1900, and completed June 6, 1900. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, gutter blocks and straight edgestones were furnished by the City, and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor.

Dresden street, Boylston street to Spring Park avenue, is about 393 feet long. The contract for constructing the surface of this street was awarded to Thomas Minton. Work under this contract was begun April 11, 1900, and completed May 18, 1900. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, gutter blocks and straight edgestones were furnished by the City and hauled to the site of the work by the

contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor.

Edison Green, Dorchester avenue to Pond street, is about 1,344 feet long. The contract for constructing the surface of this street was awarded to James McGovern. Work under this contract was begun April 16, 1900, and completed July 9, 1900 (including setting about 420 linear feet of park curb and grading and seeding a centre planting space about 10,241 square feet in area). It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, gutter blocks and straight edgestones were furnished by the City and hauled to the site of the work by the contractor; circular edgestones and park curb were furnished on the work by the City, and flagging for crosswalks by the contractor.

Edwin street, Dorchester avenue to Florida street (see report of Superintendent of Streets for 1899, page 272). A contract for laying the artificial stone sidewalks was awarded to Patrick Lyons. Work under this contract was begun October 30, 1899, and completed June 9, 1900.

Esmond street, Blue Hill avenue to Harvard street, is about 1,518 feet long. The contract for constructing the surface of this street was awarded to T. F. Bradley. Work was begun May 8, 1900, and completed August 30, 1900. It is a 6-inch macadam road with artificial stone sidewalks. Crushed stone, gutter blocks and straight edgestones were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor. A contract for laying the artificial stone sidewalks was awarded to Warren Bros. Company. Work under this contract was begun July 5, 1900, and completed August 25, 1900.

Florida street, King street to Templeton street, is about 1,133 feet long. The contract for constructing the surface of this street was awarded to Philip Doherty. Work under this contract was begun October 30, 1899, and completed August 30, 1900 (including grading and seeding a centre planting space about 14,619 square feet in area and loaming and sodding a sidewalk planting space about 5,442 square feet in area). This street is 50 feet wide, and was built in the following manner: Two sidewalks each 8 feet wide, 4.5 feet of the 8 feet being either coal tar concrete or artificial stone, the rest of the sidewalk being grass, bounded by granite edgestones; two 6-inch macadam roadways, each 9.5 feet wide without block gutters, and a centre planting space with trees, 15 feet wide. Crushed stone and straight edgestones were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor. A contract for resurfacing old and laying new tar concrete walks on that portion of the street between King and Lonsdale streets was awarded to Taylor, Carr & Andrews. Work under this contract was begun June 20, 1900, and completed June 26, 1900. A contract for laying artificial stone sidewalks on

that portion of the street between Lonsdale and Templeton streets was awarded to Warren Bros. Company. Work under this contract was begun June 27, 1900, and completed July 9, 1900. Fourteen maple trees were planted in the centre planting space in addition to those already there.

Hubbard street, Chestnut avenue to Lamartine street, is about 449 feet long. The contract for constructing the surface of this street was awarded to Thomas Minton. Work under this contract was begun November 20, 1899, and substantially completed December 27, 1899 (a small amount of work being required to finish the surface of the roadway and sidewalks during the season of 1900). It is a 6-inch macadam road with crushed stone sidewalks; crushed stone, edgestones and gutter blocks were furnished by the City and hauled to the site of the work by the contractor, and flagging for crosswalks was furnished by the contractor.

Ipswich street, Boylston road to Boylston street, is about 2,366 feet long. The contract for constructing the surface of this street was awarded to Collins & Ham. Work was begun under this contract August 16, 1899, and substantially completed December 8, 1899 (a small amount of work being required in surfacing roadway and sidewalks during season of 1900). It is a 6-inch macadam road with crushed stone sidewalks; crushed stone, straight edgestones and gutter blocks were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor. Another contract was made with Collins & Ham for building fence on northerly side of street along location of the Boston & Albany Railroad.

The Parkway bridge was unfinished, but temporary wooden fences and floor had been constructed so that it was open to travel. The ornamental iron fences have been completed, and the roadway has been paved with asphalt and the sidewalks with artificial stone. The fences should be painted to correspond in color with the fences on the adjoining bridge over the railroad.

Lauriat avenue, Ballou avenue to Norfolk street, is about 769 feet long. The contract for constructing the surface of this street was awarded to Timothy F. Bradley. Work under this contract was begun August 22, 1899, and completed August 21, 1900. It is a Telford (8 inches) macadam (4 inches) road. Telford stone, crushed stone, gutter blocks and straight edgestones were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor. Under this contract the sidewalks were omitted, but artificial stone sidewalks have since been constructed under the supervision of the Street Department.

Newburg street, Beech street to Belgrade avenue, is about 1,980 feet long. The contract for constructing the surface of this street was awarded to James Doherty & Co. Work under this contract was begun November 14, 1899, and completed May 22,

1900. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, gutter blocks and straight edgestones were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor.

Oakview terrace, from Centre street about 861 feet southeasterly. The contract for constructing the surface of this street was awarded to Collins & Ham. Work under this contract was begun November 9, 1899, and completed July 13, 1900, not including artificial stone sidewalks. It is a 6-inch macadam road with artificial stone sidewalks and sidewalk planting spaces 2 feet wide on a portion of the street, together with an oval planting space near the upper end about 5,200 square feet in area. Crushed stone, straight edgestone and gutter blocks were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor. A contract for laying the artificial stone sidewalks was awarded to Patrick Lyons. Work under this contract was begun May 21, 1900, and completed June 30, 1900.

Orkney road, Strathmore road to Sutherland road, is about 841 feet long. The contract for constructing the surface of this street was awarded to Daniel E. Lynch. Work under this contract was begun May 2, 1899, and substantially completed September 12, 1899 (a small amount of work being done in surfacing the roadway and sidewalks during season of 1900). It is a 6-inch macadam road with crushed stone sidewalks; crushed stone, gutter blocks and straight edgestones were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor.

Rowe street, Ashland street to Seymour street, is about 475 feet long. The contract for constructing the surface of this street was awarded to Philip Doherty. Work under this contract was begun December 7, 1899, and suspended December 23, 1899. This contract was cancelled by letter of Superintendent of Streets, dated May 26, 1900.

Rozella street, Adams street to Muzzy street, is about 322 feet long. The contract for constructing the surface of this street and for rebuilding a retaining wall at the Mary Hemenway School was awarded to Timothy F. Bradley. Work under this contract was begun November 27, 1899, and completed June 14, 1900. It is a 6-inch macadam road with crushed stone sidewalks; crushed stone, gutter blocks and straight edgestones were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were delivered on the work by the City, and flagging for crosswalks by the contractor.

Seymour street, Canterbury street to Brown avenue, is about 1,150 feet long. The contract for constructing the surface of this street was awarded to T. F. Welch. Work under this contract was begun December 5, 1899, and suspended December 21, 1899.

This contract was cancelled by letter of Superintendent of Streets, dated May 26, 1900.

Shafter street, Waterlow street to Faxon street, is about 744 feet long. The contract for constructing the surface of this street was awarded to Philip Doherty. Work under this contract was begun April 4, 1900, and completed May 23, 1900. It is a 6-inch macadam road with brick sidewalks; crushed stone, straight edgestones and gutter blocks were furnished by the City and hauled to the site of the work by the contractor; circular edgestones and bricks for sidewalks were furnished on the work by the City, and flagging for crosswalks by the contractor.

Warner street, Harvard street to Park street, is about 830 feet long. The contract for constructing the surface of this street was awarded to Timothy F. Bradley. Work under this contract was begun April 12, 1900, and completed July 17, 1900, not including the artificial stone sidewalks and sidewalk planting spaces. It is a 6-inch macadam road with artificial stone sidewalks; crushed stone, straight edgestones and gutter blocks were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor. A contract for laying artificial stone sidewalks was awarded to Warren Bros. Company. Work under this contract was begun June 14, 1900, and was completed July 3, 1900. The sidewalk planting spaces were finished by Timothy F. Bradley July 17, 1900.

DOVER STREET BRIDGE.

Plans and specifications were made for repairing the piers and removing part of the old draw foundation, and recovering the remaining part. A contract was made with William J. Lawler, November 30, for doing the work, which is now nearly completed.

EAST BOSTON FERRIES.

Repairs of Piers. — Specifications were made early in the year for the renewal of a few piles in the pier heads at the East Boston landing of the North Ferry. The work was done by W. H. Ellis & Co.

Specifications were made in March for repairing the north pier of the North Ferry, East Boston side. The work was done by Ross & Fowler at a cost of \$826.60.

Specifications were made in April for repairing the middle pier of the South Ferry, Boston side. The work was done by George Hayes & Co. at a cost of \$643.

Specifications were made in December for rebuilding 29 feet of the northerly pier of the North Ferry, Boston land-

1900. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, gutter blocks and straight edgestones were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor.

Oakview terrace, from Centre street about 861 feet south-easterly. The contract for constructing the surface of this street was awarded to Collins & Ham. Work under this contract was begun November 9, 1899, and completed July 13, 1900, not including artificial stone sidewalks. It is a 6-inch macadam road with artificial stone sidewalks and sidewalk planting spaces 2 feet wide on a portion of the street, together with an oval planting space near the upper end about 5,200 square feet in area. Crushed stone, straight edgestone and gutter blocks were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor. A contract for laying the artificial stone sidewalks was awarded to Patrick Lyons. Work under this contract was begun May 21, 1900, and completed June 30, 1900.

Orkney road, Strathmore road to Sutherland road, is about 841 feet long. The contract for constructing the surface of this street was awarded to Daniel E. Lynch. Work under this contract was begun May 2, 1899, and substantially completed September 12, 1899 (a small amount of work being done in surfacing the roadway and sidewalks during season of 1900). It is a 6-inch macadam road with crushed stone sidewalks; crushed stone, gutter blocks and straight edgestones were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were furnished on the work by the City, and flagging for crosswalks by the contractor.

Rowe street, Ashland street to Seymour street, is about 475 feet long. The contract for constructing the surface of this street was awarded to Philip Doherty. Work under this contract was begun December 7, 1899, and suspended December 23, 1899. This contract was cancelled by letter of Superintendent of Streets, dated May 26, 1900.

Rozella street, Adams street to Muzzy street, is about 322 feet long. The contract for constructing the surface of this street and for rebuilding a retaining wall at the Mary Hemenway School was awarded to Timothy F. Bradley. Work under this contract was begun November 27, 1899, and completed June 14, 1900. It is a 6-inch macadam road with crushed stone sidewalks; crushed stone, gutter blocks and straight edgestones were furnished by the City and hauled to the site of the work by the contractor; circular edgestones were delivered on the work by the City, and flagging for crosswalks by the contractor.

Seymour street, Canterbury street to Brown avenue, is about 1,150 feet long. The contract for constructing the surface of this street was awarded to T. F. Welch. Work under this contract was begun December 5, 1899, and suspended December 21, 1899.

ing, and making other small repairs on the same piers. The work was done by Wm. J. Lawler at a cost of \$472.89.

MOUNT WASHINGTON AVENUE BRIDGE.

A plan and specifications were made for making general repairs on this bridge, but as the plan failed of approval by the Harbor and Land Commissioners no work has been done.

SOUTH UNION STATION.

Early in April, 1900, the work of repaving Atlantic avenue with granite blocks on a concrete base with pitch and pebble joints was resumed under the contract with H. Gore & Co., dated Nov. 6, 1899, and the entire work completed July 30, 1900.

The area paved included the portion of the street east of the street car tracks between Summer street and Kneeland street and a small area at the intersection of Beach street, where the work had been postponed on account of the delay in setting the special track-work at that point. Two small areas in Dewey square were also repaved with granite blocks, thus completing the entire pavement in the square on a concrete base with pitch and pebble joints.

Beach street, between Atlantic avenue and South street, was regraded, the edgestone set, sidewalk relaid with brick, and the street repaved with granite blocks on a gravel base.

WINTHROP BRIDGE.

Plans and specifications were made for renewing some of the piles of this bridge which had been badly eaten by the "limnoria," and for making general repairs. A contract was made November 30 with William L. Miller for doing the work, which is now under way.

ASSESSMENT STREETS.

Working plans, specifications, and forms of contract were prepared and forwarded to the Street Department for the following assessment streets:

Ashby street, Commonwealth avenue to Bay State road.

Ashley street, Breed street to Walley street.

Bay State road, Granby street to Chilmark street.

Cardington street, Cobden street across Fenner street.

Chilmark street, Commonwealth avenue to Bay State road.

Corinth street, Washington street to Brandon street.

Dunford street, Cobden street to Fenner street.

Echo street, Columbus avenue to Centre street.

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Fowler street, Glenway street to McLellan street.
Homes avenue, Bowdoin street to Topliff street.
Montague street, Ashmont street to Roslin street.
Nottingham street, Bullard street to Bowdoin avenue.
Province court, Province street easterly.
Public alley, No. 432, between Commonwealth avenue and Newbury street, from Fairfield street to Gloucester street.
Rockford street, Dudley street to Clifton street.
Seaborn street, Centre street to Kenwood street.
Stratford street, Anawan avenue to Clement avenue.
Tremont street, Washington street to Newton line.
Trinity place, Stuart street to Stanhope street.
Van Winkle street, Dorchester avenue to Shawmut Branch Railroad.
Washington street, Morton street to Tower street.
Woodcliff street, Howard avenue easterly.
Wordsworth street, Saratoga street to Pope street.

PLANS AND SPECIFICATIONS FOR REPAVING STREETS.

Preliminary surveys were made and working plans, specifications, and forms of contract were prepared and forwarded to the Street Department for repaving the following streets:

Atlantic avenue, Oliver street across India square.
Atlantic avenue, India square across Clinton street.
Atlantic avenue, Clinton street to Eastern avenue.
Beacon street, Arlington street to Dartmouth street.
Boylston street, Arlington street to Berkeley street.
Commercial street, Eastern avenue across Hanover street.
Commercial street, Hanover street across Hull street.
Commercial street, Fleet street across Clinton street.
Devonshire street, State street across Water street.
Harrison avenue, Davis street to Asylum street.
Mason street, Tremont street easterly.
Meridian street, Trenton street to Eutaw street.
Neponset avenue, Adams street to Minot street.
Oliver street, Atlantic avenue to Milk street.
Summer street (southerly side), Washington street to Federal street.
Temple place, Washington street to Tremont street.
Tremont street, Scollay square to Boylston street.

PLANS FOR REPAVING STREETS.

Preliminary surveys were made and working plans were prepared and forwarded to the Street Department for repaving the following streets:

Blue Hill avenue, Intervale street to Dewey street.
Broadway extension, Washington street to Harrison avenue.

Dover street, Washington street to Tremont street.
Northampton street, Harrison avenue to Albany street.
Prince street, Salem street 210 feet toward Hanover street.
Tremont street, Dover street to Boston & Albany Railroad Bridge.

MISCELLANEOUS.

Preliminary surveys have been made and plans have been prepared of the following Assessment streets and Public alleys, preliminary to construction:

B street, West First street to Congress street.
Berkeley street, Boylston street to Columbus avenue.
Bird street, Columbia road to Hancock street.
Boardman street, Saratoga street to Boston & Maine Railroad.
Brookline avenue, Longwood entrance to the Riverway.
Carlow street, Albany street to Chadwick street.
Conrad street, Sumner street, 224 feet westerly.
Dixfield street, Old Harbor street to Covington street.
Gainsborough street, St. Stephen street to Hemenway street.
Gibson street, Dorchester avenue to Adams street.
Hancock street, Columbia road to Winter street.
Leonard street, Duncan street to Adams street.
Moseley street, Crescent avenue to Columbia road.
Normandy street, Lawrence avenue across Grove street.
Perkins street, Centre street to Jamaica way.
Public alley, No. 414, between Beacon and Marlborough streets, from Hereford street to Massachusetts avenue.
Public alley, No. 415, between Beacon and Marlborough streets, from Gloucester street to Hereford street.
Public alley, No. 416, between Beacon and Marlborough streets, from Fairfield street to Gloucester street.
Public alley, No. 417, between Beacon and Marlborough streets, from Exeter street to Fairfield street.
Public alley, No. 421, between Beacon and Marlborough streets, from Arlington street to Berkeley street.
Public alley, No. 430, between Commonwealth avenue and Newbury street, from Massachusetts avenue to Hereford street.
Railroad street, Corey street to Willow street.
Shepton street, Dorchester avenue to Florida street.
Spencer street, Athelwold street to Harvard street.
Templeton street, Dorchester avenue to Adams street.
Thane street, Athelwold street to Harvard street.
Westbourne street, Cornell street to Beech street.

GRADING STREET RAILWAY TRACKS.

The grades for tracks in the following streets have been determined and the necessary surveys made for determining

the same, except that the Boston Elevated Railway Company made the surveys for Adams and Webster streets.

Boston Elevated Railway Company.

Adams street, Neponset avenue to Minot street.

Atlantic avenue, Oliver street to Commercial street.

Beach street, Atlantic avenue to South street.

Blue Hill avenue, Intervale street to Dewey street.

Broadway extension, Harrison avenue to Washington street.

Brookline avenue, Longwood entrance to the Riverway.

Causeway street, Nashua street to Haverhill street.

Columbia road, at Stoughton street.

Commercial street, Atlantic avenue to Hull street.

Dover street, Tremont street to Washington street.

Green street, Bowdoin square to Chambers street.

Harrison avenue, Davis street to Asylum street.

Longwood avenue, Huntington avenue to Brookline avenue.

Massachusetts avenue, Swett street to Edward Everett square.

Neponset avenue, Adams street to Minot street.

Northampton street, Albany street to Harrison avenue.

Pleasant street, Tremont street to Shawmut avenue.

Swett street, Albany street to Massachusetts avenue.

Tremont street, Dover street to Boston & Albany Railroad Bridge.

Tremont street (Brighton), Washington street to Newton line.

Webster street, Orleans street to Sumner street.

Western avenue, at Market street.

West Roxbury and Roslindale Street Railway Company.

Washington street, Adams street to Neponset river.

Union Freight Railroad Company.

Atlantic avenue, Oliver street to Commercial street.

Commercial street, Atlantic avenue to Hull street.

Total length of single track grades 17.2 miles.

MISCELLANEOUS PLANS, SPECIFICATIONS, ETC.

The following plans have been prepared and the preliminary surveys necessary for the same have been made.

Alford street, Mystic river to Everett line, plan of cross-section for construction; plan of solid filling and riprap.

Bay State road, Granby street to Chilmark street, plan of cross-section for construction; plan, cross-section and specification for cap-stone for sea-wall; plan and specifications for arch and sea-wall opposite Ashby street.

Bennington street, Chelsea street to Revere line, cross-section of street as approved for construction.

Beacon street, Arlington street to Dartmouth street, cross-section.

Brookline avenue, Longwood entrance to the Riverway, cross-section of construction; plan of proposed change in line and grade near Longwood entrance.

Cambridge street, between Warren street and Washington street, plan and section of ground water drains.

Centre street, opposite New Heath street, plan and specifications for retaining wall.

Devonshire street, State street to Water street, plan of templet for concrete base.

Echo street, Columbus avenue to Centre street, cross-section for construction.

Edison Green, Dorchester avenue to Pond street, plan and specifications for park curb for planting space.

Florida street, King street to Lonsdale street, plan and specifications for tar concrete sidewalks.

Freeport street, At Dorchester Yacht Club property, plan, sections and specifications for extending retaining wall.

Harrison avenue, Davis street to Asylum street, plan of templet for concrete base.

Macadam street, 20 feet wide, cross-sections for construction.

Mason street, from Tremont street, plan of templet for concrete base.

Meridian street, Trenton street to Eutaw street, plan of templet for concrete base.

Moseley street, at Columbia road, proposed change of grade.

Newburg street, Beech street to beyond Cornell street, plan for ground water drains.

Pontiac street, Tremont street to Hillside street, plan and specifications for retaining walls and fences.

Stratford street, Anawan avenue to Clement avenue, plan and section of artificial stone sidewalks.

Tremont street, easterly side, from School street to Mason street, plan for widening sidewalk.

Trinity place, Stuart street to Stanhope street, plan and specification for wall and fences.

Van Winkle street, Dorchester avenue to Shawmut Branch Railroad, cross-section for construction.

Waldeck street, Park street to near Tonawanda street, plan for tar concrete sidewalks.

Respectfully submitted,

WILLIAM JACKSON,

City Engineer.

APPENDIX J.

REPORT OF THE CHIEF SMOKE INSPECTOR.

64 PEMBERTON SQUARE, BOSTON, February 1, 1901.

MR. B. T. WHEELER,

Superintendent of Streets:

DEAR SIR, — I herewith submit a report of the work performed under chapter 389, Acts of 1895, section 116; chapter 175, Acts of 1897; and section 99, chapter 47, Revised Ordinances, 1898, relative to the smoke nuisance in this City.

The emission of dark or thick gray smoke for more than five minutes continuously, constituting what is technically called the smoke nuisance, causes great inconvenience to modern city dwellers. The causes of this nuisance are few and the remedies comparatively simple. The chief cause is ignorance, — either in the construction of the building or plant, or in the purchase of the proper coal for fuel, or, as is most frequently the case, on the part of stokers or firemen in charge of the plant. Very few persons wilfully or intentionally violate the law, and in the majority of cases it is only necessary to bring the matter properly before them to have the remedy applied. The chief value of this Department in the City of Boston is as an instructor, in pointing out defects existing in any plant and suggesting the proper method for relief. Nearly all the owners of large plants called upon during the past year have shown a decided willingness to assist in correcting all defects and in issuing instructions to their engineers in charge.

The following instructions for firing, prepared by this Department, have been largely distributed and proved of value.

INSTRUCTIONS FOR FIRING BOILERS WITH BITUMINOUS COAL.

1. All large coal should be broken up so that the largest pieces are no greater than a man's fist.
2. Begin to charge the furnace at the bridge end, and keep firing to within a few inches of the dead plate.

3. Never allow the fire to burn so low, before a fresh charge is thrown in, that there shall not be at least three to four inches depth of clean incandescent fuel on the bars, and equally spread over the whole grate.

4. Keep the bars constantly covered, particularly at the sides and bridge end where the fuel burns away most rapidly.

5. If the fire burns unequally, or in holes, the vacant spaces must be filled up.

6. Under ordinary conditions the thickness of fire will vary from four to eight inches for different amounts of draught and rate of combustion. The best thickness to carry must be determined for each case, bearing in mind, however, that a very thick fire is conducive to smoke production.

7. The greatest preventive of smoke is frequent firing of small quantities on alternate sides of the furnace.

8. With a battery of boilers, one boiler must be fired at a time on one side of the furnace only, then the next boiler in the same manner, and so on to the end; then beginning again with the first boiler, fire the other side of the furnace, and so on down through the battery.

9. If there is no other means of admitting air than through the grate and at the fire door, the register in the fire door should be left open after firing, and if the boilers are forced it should be left open all the time.

10. With a shallow ash-pit the ashes should be removed frequently to allow free inlet for air and to prevent burning the grates.

In addition to complaints of smoke from buildings, several have been received of violation of the law from portable boilers used by contractors in building construction. This was caused by the use of soft coal for fuel, and in all cases a change to hard coal brought immediate relief.

Several unusually large plants, either recently established or in process of construction, have been inspected, notably the Back Bay Station of the New York, New Haven & Hartford Railroad Company at Dartmouth street, and the Edison Electric Illuminating Company on Atlantic avenue, both of which are not only equipped with all modern appliances for furnishing power, but also for the relief of smoke nuisance.

It is perhaps well to state in this connection, that in large plants of this character complaint is often received of violation of the smoke law. This is not due to wilfulness or ignorance, but to an endeavor on the part of managers to obtain the best as well as the most economical methods of construction and operation. In no other way except by experiment can this be demonstrated. Many appliances are tried and found defective, and it is the change from one

method to another, either of construction or operation, which occasions the variation in the amount of smoke.

During the year, 285 short observations, of two or three hours, have been taken by the inspectors in the several districts. Twelve observations, of from five to eight hours, were taken in the business section of the City; four of these not as the result of complaints, but at the request of the owners of the property; two of whom, the R. H. White Company and the Oliver Ditson Company, have, as the result of the examinations, equipped their boilers with smoke consumers.

The Back Bay district has received special attention. All of the large hotels and the Massachusetts Institute of Technology, Boston Public Library and other buildings operating large steam plants have been thoroughly inspected. Many of them, notably the Public Library, were equipped with smoke-consuming devices. Where these were lacking they have either been supplied or are still subjects of investigation.

As the result of my observations throughout the city, I believe the laws governing and regulating the smoke nuisance should be made more stringent, and more nearly in accord with those in force in other cities, particularly by reducing the five-minute limit to two minutes.

NOVA SCOTIA COAL.

Importations of Coal from Nova Scotia at this Port during the Year ending January 31, 1901.

MONTH.	Tons.	Value.
February, 1900	59,896	\$70,895
March	45,702	45,702
April	48,041	48,041
May	31,732	31,732
June	41,516	44,435
July	35,995	45,009
August	44,254	55,421
September	45,029	56,287
October	50,382	62,979
November	56,059	71,717
December	49,298	61,432
January, 1901	45,125	56,743
Total	553,029	\$650,393

Nova Scotia coal recorded at the Collector's office (Custom House), ending January 31, 1901, shows 553,029 tons as against 240,543 tons for the year ending January 31, 1900.

BOILER APPLICATIONS.

During the past year 343 applications have been received from the Building Department for boiler permits, and were disposed of as follows :

Signed to use hard coal	265
New consumers adopted	29
Gas and oil engines	35
Applications withdrawn	2
Relocations	3
Duplicates	3
Unsigned	6
	<hr/>
	343

SPECIAL REPORTS.

February 28. Report on boiler plant of the R. H. White Company, 518 Washington st.

March 20. Report on complaint against the Post Office building.

April 9. Report on complaint against plant of the Quaker building, Milton place and Federal court.

April 17. Report on complaint against the Westminster Chambers and the Massachusetts Institute of Technology.

June 10. Report on complaint against the Boston Globe Newspaper Company building.

July 3. Report on complaint against smoke from street hoisting engines, Massachusetts avenue.

July 17. Report on complaint against the Warren building, 2 Park square.

August 13. Report with observations on plant of estate 1260 Washington street, Merello's Bakery.

September 11. Report, with short observations, on complaint against estate 81 Devonshire street.

September 18. Report on complaint against plant of the Boston Elevated Railway Company, Freeport street, Dorchester.

October 17. Report on plant at the Back Bay Station, Dartmouth street, of the New York, New Haven and Hartford Railroad Company.

October 30. Report, with observations, on plant of the R. H. White Company, newly equipped with the Boston Smoke Consumer.

January 11, 1901. Report on complaint against the Winterplace Hotel plant.

January 18. Report, with observations, on plants of Hotel Brunswick, Massachusetts Institute of Technology, Public

STREET DEPARTMENT — SMOKE INSPECTION. 241

Library, Westminster Chambers, Nottingham, Victoria and Copley Square hotels.

SUMMARY.

I submit a brief summary of work for the year ending January 31, 1901 :

Number of applications for boiler permits received . . .	343
Number of smoke consumers adopted	29
Number of objection notices sent out	97
Number agreeing to burn hard coal	265
Number of short observations taken	285
Number of observations from 5 to 8 hours	12
Number of special reports	15
Number of complaints received	9
Number of special requests for observations received . . .	4

Respectfully submitted,

SUMNER APPLETON,
Chief Inspector.

APPENDIX K.

REPORT OF THE CIVIL SERVICE CLERK.

BOSTON, February 1, 1901.

MR. B. T. WHEELER,

Superintendent of Streets:

DEAR SIR,—I submit herewith a report of the work performed in connection with the Civil Service Commission, together with a statement of the force employed and eligible for employment for the year ending January 31, 1901.

Two hundred and seventy-five applications were made upon the Commission for 2,012 men of various grades, and of this number 9 were for promotion and 7 for reinstatement.

Three thousand one hundred seventy-five names were submitted, from which 478 were selected and appointed, 50 of whom were veterans, and 38 were appointed provisionally under Civil Service Rule 36.

Of the 9 applications for promotions all were granted.

One hundred and six transfers were made from other City and State Departments, with the approval of the Civil Service Commission, as follows:

One was from the Bath Department, 54 from Park Department, 15 from the Department of Public Grounds, 12 from the Engineering Department, 10 from the Public Buildings Department, 9 from Water Department, 2 from Transit Commission, 2 from Metropolitan Park Commission, and 1 from the Pauper Institutions Department.

Notices of the discharge of 160 men were forwarded to the Civil Service Commission.

The records of the Department show that there are now 3,196 persons eligible for employment in the several divisions, and of that number 3,008 were upon the January, 1901, pay-rolls.

Grade and Number of Employees.

TITLE.	DIVISIONS.							
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridges.	Street Watering.
Superintendent	1							
Deputies	1	1	1	1	1	1	1	1
Secretary	1							
Purchasing Agent	1							
Purchasing Agent's assistant	1							
Clerks	1	14	7	4	2	2	2	1
Messengers		9	6	5	3		3	1
Chief Engineer		1	1					
Civil Engineers		13	13					
Draughtsman		1	16					
Instrument-men			11					
Rodmen		12	44					
Abatement Agent								1
Aids or tallymen		17	8	4	1			2
Axeman			2					
Inspectors		32	32	24	1			
Foremen		10	11	7	10	3	1	
Sub-foremen		18	12	9	20		2	
Chief Inspector		1	1					
Blacksmiths and assistants		19	4	14		2		
Boiler-makers						1		
Bracers and assistants			24					
Boys		4	7					
Broom-makers					1			
Captains				1		10		
Carpenters and assistants		19	11			2	19	
Concrete-washer			1					
Concrete-mixer			8					
Cashier						1		
Coal-passers			5					
Supervisors of draws and bridges							1	
Coachmen		1	1					
<i>Carried forward</i>	5	172	226	69	39	22	29	6

Grade and Number of Employees.— Continued.

TITLE.	DIVISIONS.								
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridges.	Street Watering.	Total.
<i>Brought forward</i>	5	172	226	69	39	22	29	6	568
Drawtenders.....							20		20
Assistant drawtenders.....							44		44
Deck-hands.....						14			14
Dumpers.....				30	7				37
Chief Engineer (steam).....			1			1			2
Engineers and assistants.....		18	30			11	11		70
Electricians.....						3	1		4
Farmer.....		1							1
Feeders.....					2				2
Firemen.....			4			19			23
Gatemen.....			4			18			22
Harness-makers and assistants....		3		7	1				11
Horseshoers.....				6					6
Hostlers.....			2				3		5
Iron-workers.....			1			1			2
Janitors.....						7			7
Janitresses.....						5			5
Joiners.....						2			2
Laborers and helpers.....		522	471	199	211	1			1,404
Lamplighters.....						2			2
Ledgemen.....			76						76
Machinists and assistants.....			2			3			5
Masons (stone and brick).....			40						40
Mason's tenders.....			2						2
Mate.....			1						1
Measurers.....		1	1						2
Oilers.....			9			7			16
Pavers and assistants.....		30							30
Painters.....		2	7	8		1	3		21
Pilots.....			1			10			11
Pipelayers.....			3						3
Powdermen.....		2							2
<i>Carried forward</i>	5	751	881	319	260	127	111	6	2,460

Grade and Number of Employees. — *Concluded.*

TITLE.	DIVISIONS.								
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Street Watering.	Total.
<i>Brought forward</i>	5	751	881	319	260	127	111	6	2,460
Quarryman		1							1
Rigger		1							1
Rammer.....		1							1
Sailors.....			4						4
Steam-drillers.....		8							8
Stenographers.....	1	1	1	1					4
Stone-cutters.....		25	7						32
Storekeepers.....			2			1			3
Stablemen.....		13		25	10				48
Teamsters		62	8	189	67		1		327
Tollmen.....						11			11
Tank-man.....						1			1
Watchmen.....		18	12	9	1	4	6		50
Welghers.....		6	1	1					8
Wharfingers and assistants.....		10	1	1	1	11			24
Wheelwrights and assistants.....				6					6
Wood-workers.....			1						1
Yardmen.....		3	1	10	2		1		17
Veterinary's assistant.....			1						1
Total.....	6	900	920	561	341	155	119	6	3,008

Comparative Table showing the Number of Employees
February 1, 1900, and February 1, 1901.

DATE.	DIVISIONS.								
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Street Watering.	Total.
February 1, 1900.....	6	975	1,036	540	369	178	122	9	3,235
February 1, 1901.....	6	900	920	561	341	155	119	6	3,008

Table showing Transfers made from various City and State Departments to the Several Divisions of the Street Department.

DIVISIONS.	DEPARTMENTS.								
	Bath.	Park.	Public Grounds.	Water.	Public Buildings.	Transit.	Engineering.	Metropolitan Park.	Pauper Institutions.
Paving	1	26	9	2	.....	.....	11	2	1
Sewer .....	.....	3	1	1	2	2	1	.....	.....
Sanitary .....	.....	20	4	3	1	.....	.....	.....	.....
Street Cleaning .....	.....	5	1	.....	.....	.....	.....	.....	.....
Ferry .....	.....	.....	.....	1	5	.....	.....	.....	.....
Bridge .....	.....	.....	.....	1	2	.....	.....	.....	.....
Central Office .....	.....	.....	.....	1	.....	.....	.....	.....	.....
Total	1	54	15	9	10	2	12	2	1

Table showing the number of Applications for Various Grades of Men made upon the Civil Service Commission for the Year ending January 31, 1901.

DIVISIONS.	Applications.	Number applied for.	Number submitted by Civil Service Commission.	Number appointed.	Provisional appointments included in four previous columns.	Reinstatements included in four previous columns.	Veterans appointed included in four previous columns.
Paving	83	609	997	141	16	2	16
Sewer	55	398	674	84	8	4	7
Sanitary	64	564	736	95	4	.....	7
Street Cleaning	19	146	230	47	7	1	4
Ferry	33	172	329	51	2	.....	5
Bridge	14	85	138	27	1	.....	8
Street watering,	5	36	70	29	.....	.....	3
Central Office...	2	2	1	4	.....	.....	.....
Total	275	2,012	3,175	478	38	7	50

The above table includes nine persons that were promoted ; also fifty veterans that were appointed, five as Inspectors, eight as Foremen, four as Sub-foremen, two as Gatemen, fifteen as Laborers, two as Steam Engineers, seven as Clerks, two as Messengers, four as Mechanics, and one as Tallyman.

Seven requisitions were made for reinstating seven discharged employees.

Respectfully submitted,

AMOS B. M. KINGSLEY.

Civil Service Clerk.

APPENDIX L.

FORMER SUPERINTENDENTS AND DOCUMENT
NUMBERS OF ANNUAL REPORTS.**Bridge Department before 1891.***Previous to 1886, under charge of City Engineer.*

NAME.	Year.
Bartholomew M. Young	1886 to 1889
James H. Nugent	1889 to 1891

Bridge Department before 1891.

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
Annual report	1886	1887	29
" "	1887	1888	26
" "	1888	1889	29
" "	1889	1890	22
" "	1890	1891	*

* Published in annual report, Executive Department, Part I., City Document No. 1, 1891.

Paving Department before 1891.

NAME.	Year.
Enoch Patterson, Superintendent Streets and Drains .	1825 to 1831
Zephaniah Sampson, " " " "	1831 to 1846
Thomas Hunting, Superintendent	1846 to 1853
Alfred T. Turner, "	1853 to 1864
Charles Harris, "	1864 to 1883
Nehemiah T. Merritt, "	1883
James J. Flynn, "	1883
Charles Harris, "	1884
Michael Meehan, "	1884 to 1886
John W. McDonald, "	1886 to 1889
J. Edwin Jones, "	1889 to 1891

Sewer Department before 1891.

NAME.	Year.
Enoch Patterson, Superintendent	1825 to 1831
Zephaniah Sampson, "	1831 to 1837
Charles B. Wells, "	1837 to 1856
Simeon B. Smith, "	1856 to 1863
William H. Bradley, "	1863 to 1883
Horace A. Moses, "	1883 to 1885
Thomas J. Young, "	1885 to 1887
Seth Perkins, "	1887 to 1889
Charles Morton, "	1889 to 1891

Sewer Department before 1891.

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. Doc.
Annual report	1859	1861	11
" "	1860	1861	12
" "	1861	1862	12
" "	1862	1863	13
" "	1863	1864	11
" "	1864	1865	5
" "	1865	1866	6
" "	1866	1867	8
" "	1867	1868	13
" "	1868	1869	11
" "	1869	1870	3
" "	1870	1871	11
" "	1871	1872	10
" "	1872	1873	13
" "	1873	1874	12
" "	1874	1875	17
" "	1875	1876	11
" "	1876	1877	13
" "	1877	1878	15
" "	1878	1879	11
" "	1879	1880	16
" "	1880	1881	19
" "	1881	1882	18
" "	1882	1883	16
" "	1883	1884	43
" "	1884	1885	
" "	1885	1886	58
" "	1886	1887	69
" "	1887	1888	81
" "	1888	1889	129
" "	1889	1890	14
" "	1890	1891	*

* Published in annual report, Executive Department, Part II., City Document No. 1, 1891.

Health Department before 1891.*Sanitary.*

NAME.	Year.
Ezra Forristall, Superintendent	1853 to 1854
Joseph W. Coburn, "	1854 to 1855
Ezra Forristall, "	1855 to 1869
George W. Forristall, "	1869 to 1890

Health Department before 1891.*Sanitary.*

NAME OF DOCUMENT.	Year.	Pub. Year.	No. of Doc.
Annual report	1853	1854	7
" "	1854	1855	6
" "	1855	1856	4
" "	1856	1857	4
" "	1857	1858	4
" "	1858	1859	4
" "	1859	1860	5
" "	1860	1861	6
" "	1861	1862	5
" "	1862	1863	5
" "	1863	1864	4
" "	1864	1865	4
" "	1865	1866	8
" "	1866	1867	7
" "	1867	1868	8
" "	1868	1869	12
" "	1869	1870	4
" "	1870	1871	10
" "	1871	1872	17
" "	1872	1873	40
Annual report from 1873 to 1884, inclusive ; the Superintendent's report was embodied in the report of the Board of Health	1885	1886	45
Annual report	1886	1887	22
" "	1887	1888	16
" "	1888	1889	23
" "	1889	1890	21
" "	1890	1891	*

* Published in annual report, Executive Department, Part II., City Document No. 1, 1891.

Commissioners of Cambridge Bridges before 1891.
(West Boston, Canal, and Prison Point.)

NAME.	Year.
Frederick W. Lincoln, Commissioner for Boston,	May 22, 1871, to March, 1891.
Ezra Parmenter, Commissioner for Cambridge,	June 14, 1871, to Jan. 31, 1883.
William J. Marvin, Commissioner for Cambridge,	March 28, 1883, to present time.

NOTE. — Harvard Bridge added in 1892. Essex street, Cambridge street, North Harvard street, and Western avenue bridges to Cambridge were transferred from Street Department, July 1, 1898.

Commissioners of Cambridge Bridges before 1891.
(West Boston, Canal, and Prison Point.)

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
Annual report	1871	1872	19
" "	1872	1873	12
" "	1873	1874	16
" "	1874	1875	23
" "	1875	1876	20
" "	1876	1877	12
" "	1877	1878	10
" "	1878	1879	8
" "	1879	1880	12
" "	1880	1881	8
" "	1881	1882	15
" "	1882	1883	15
" "	1883	1884	19
" "	1884	1885	8
" "	1885	1886	12
" "	1886	1887	19
" "	1887	1888	25
" "	1888	1889	22
" "	1889	1890	20
" "	1890	1891	*

*Published in annual report, Executive Department, Part I., City Document No. 1, 1891.

Ferry Department before 1895.

NAME.	Year.
Board of Ferry Directors	1870 1891
William J. Burke, Superintendent	1891 May 1, 1895
Thomas Kellough	May 1, 1895 July 1, 1895

Ferry Department before 1895.

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
Annual report	1870	1871	41
" "	1871	1872	55
" "	1872	1873	81
" "	1873	1874	42
" "	1874	1875	65
" "	1875	1876	51
" "	1876	1877	53
" "	1877	1878	49
" "	1878	1879	60
" "	1879	1880	74
" "	1880	1881	77
" "	1881	1882	72
" "	1882	1883	93
" "	1883	1884	76
" "	1884	1885	72
" "	1885	1886	28
" "	1886	1887	12
" "	1887	1888	10
" "	1888	1889	3
" "	1889	1890	4
" "	1890	1891	*
" "	1891	1892	12
" "	1892	1893	11
" "	1893	1894	11
" "	1894	1895	11

*Published in annual report, Executive Department, Part I., City Document No. 1, 1891.

Street Department since 1891.

Superintendent.

Henry H. Carter, Member of American Society Civil Engineers.

Resigned December 8, 1894.

Charles R. Cutter, *Acting Superintendent from December 8, 1894, to January 14, 1895.*

Member of the Boston Society Civil Engineers.

Bertrand T. Wheeler, *Superintendent from January 14, 1895, to February 4, 1896.*

Member of the Boston Society Civil Engineers.

Benjamin W. Wells, *Superintendent from February 4, 1896, to February 1, 1900.*

Bertrand T. Wheeler, *Superintendent from February 2, 1900, to the present time.*

Member of the Boston Society Civil Engineers.

BRIDGE DIVISION.—John A. McLaughlin, *Deputy Superintendent until June 1, 1895.*

BRIDGE DIVISION.—John P. Wise, *Deputy Superintendent from June 1, 1895, to February 14, 1896.*

BRIDGE DIVISION.—William H. Carberry, *Deputy Superintendent from February 14, 1896, to February 3, 1900.*

BRIDGE DIVISION.—Walter Reed, *Deputy Superintendent from February 5, 1900, to the present time.*

FERRY DIVISION.—Thomas Kellough, *Deputy Superintendent from July 1, 1895, to February 14, 1896.*

FERRY DIVISION.—William F. McClellan, *Deputy Superintendent from February 14, 1896, to February 3, 1900.*

- FERRY DIVISION.—Joseph J. Dennison, *Deputy Superintendent from February 5, 1900, to the present time.*
- PAVING DIVISION.—Charles R. Cutter, *Deputy Superintendent until January 24, 1895.*
- PAVING DIVISION.—Darius N. Payson, *Deputy Superintendent from January 24, 1895, to March 1, 1896.*
- PAVING DIVISION.—John L. Kelly, *Deputy Superintendent from March 1, 1896, to February 3, 1900.*
- PAVING DIVISION.—Darius N. Payson, *Deputy Superintendent from February 5, 1900, to the present time.*
- SANITARY DIVISION.—George W. Forristall,¹ *Deputy Superintendent.*
- SANITARY DIVISION.—Philip A. Jackson, *Acting Deputy Superintendent from January 16, 1894, to February 1, 1895.*
- SANITARY DIVISION.—Charles A. Young, *Deputy Superintendent from February, 1895, to March 1, 1896.*
- SANITARY DIVISION.—Patrick O'Shea, *Deputy Superintendent from March 1, 1896, to February 3, 1900.*
- SANITARY DIVISION.—Charles A. Young, *Deputy Superintendent from February 5, 1900, to the present time.*
- SEWER DIVISION.—Henry W. Sanborn, *Deputy Superintendent until July 10, 1896.*
Member Philadelphia Society Civil Engineers.
- SEWER DIVISION.—Charles R. Cutter, *Deputy Superintendent from July 10, 1896, to February 3, 1900.*
Member of the Boston Society of Civil Engineers.
- SEWER DIVISION.—Guy C. Emerson, *Deputy Superintendent from February 5, 1900, to the present time.*
- STREET CLEANING DIVISION.—Phillip A. Jackson, *Deputy Superintendent until March 22, 1895.*
- STREET CLEANING DIVISION.—Benjamin M. Cram, *Deputy Superintendent from March 22, 1895, to March 1, 1896.*
- STREET CLEANING DIVISION.—Joshua Atwood, 8d, *Deputy Superintendent from March 1, 1896, to February 3, 1900.*
Member of the Boston Society of Civil Engineers.
- STREET CLEANING DIVISION.—Frank H. Haynes, *Deputy Superintendent from February 5, 1900, to the present time.*
- STREET WATERING DIVISION.—M. Edward Libby, *Deputy Superintendent from March 6, 1895, to March 1, 1896.*
- STREET WATERING DIVISION.—Thomas J. Finneran, *Deputy Superintendent from March 1, 1896, to February 3, 1900.*
- STREET WATERING DIVISION.—Frederick Hammond, *Deputy Superintendent from February 5, 1900, to the present time.*
- BOSTON AND CAMBRIDGE BRIDGES.—Henry H. Carter, *ex-officio, Commissioner for Boston, until December 8, 1894.*
Charles R. Cutter, *Acting from December 8, 1894, to January 14, 1895.*
Bertrand T. Wheeler, *from January 14, 1895, to February 4, 1896.*
Benjamin W. Wells, *from February 4, 1896, to February 1, 1900.*
Bertrand T. Wheeler, *from February 2, 1900, to the present time.*
William J. Marvin, *Commissioner for Cambridge.*

Street Department.

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
Annual report, Executive Dept. Part II.	1891	1892	36
" " " " "	1892	1893	34
" " " " "	1893	1894	34
" " " " "	1894	1895	34
" " " " "	1895	1896	29
" " " " "	1896	1897	29
" " " " "	1897	1898	34
" " " " "	1898	1899	35
" " " " "	1899	1900	38
" " " " "	1900	1901	38

¹ Died January 12, 1894.



